

Public Utilities

FORTNIGHTLY



May 12, 1938

THE "PEOPLE'S" PROPAGANDA

By Millard Milburn Rice

« »

Increasing Competition for the Gas
and Electric Market

By C. Emery Troxel

« »

Waste in Ill-considered Federal
Public Works Projects. Part IV.

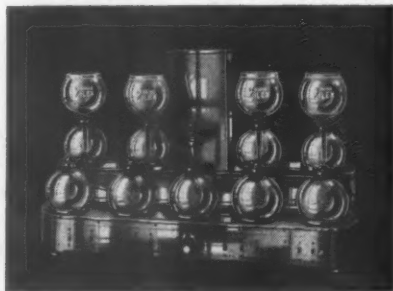
By Henry Earle Riggs

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

A New Load Building Opportunity with *Genuine* SILEX

Hotels, restaurants, lunch counters, soda fountains, eating places of all kinds, will buy Silex Glass Coffee Making Equipment this spring. They'll take advantage of our special deal which allows up to \$50 trade-in on their old, out-moded equipment. Restaurants, hotels, etc., want Silex Coffee Making Equipment because they know it makes better coffee . . . that Silex pioneered the modern swing to coffee made in glass.

Here, then, is a real opportunity to increase your commercial load. Silex Glass Coffee Making Equipment maintains steady, high peak current consumption because it is in daily use—often 24 hours out of 24. Silex Glass Coffee Making Equipment is "tops" in its field and with these trade-in offers, during May and June, you have a "natural" for adding increased load to your lines.



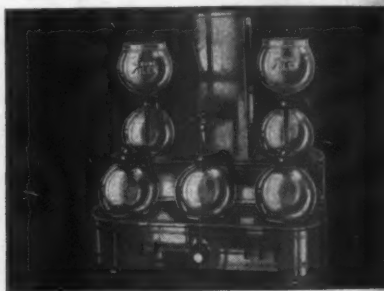
1. Consider the CARLTON 8-unit Electric model. Stainless steel range body—4 gallon water tank with Automatic Filling Device and Thermostatic Heat Control supplies hot water (190°) at high speed. Storage or warming capacity up to 96 cups. Brews as few as 12— or as many as 396 cups per hour. Yet this reserve capacity is always available.

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- \$5 allowance on ROYAL 4-unit model.
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- \$2 allowance on TRAYMORE 2-unit model.

These trade-in allowances apply only on models complete with glassware.

All Silex Commercial Models are equipped with genuine Pyrex Brand Glass guaranteed against heat breakage. Also, the famous Silex patented filter that insures clear, clean, healthful coffee, free of all sediment.



2. Or take the CARLTON 4-unit Electric model. Stainless steel range body. 4 gallon hot water tank. Storage or warming capacity up to 48 cups. Will efficiently brew from 12 up to 240 cups per hour.

FREE BOWL HOLDER with every trade-in!

This new Moldex rack offers a convenient simple place to store upper bowls. It may be fastened on the wall or backbar . . . And it is FREE with every one of these trade-in models.



THE SILEX CO., Dept. P, Hartford, Conn.

Please tell me how to build load on our line with Silex Glass Coffee Makers.

Name

Street

City State.....

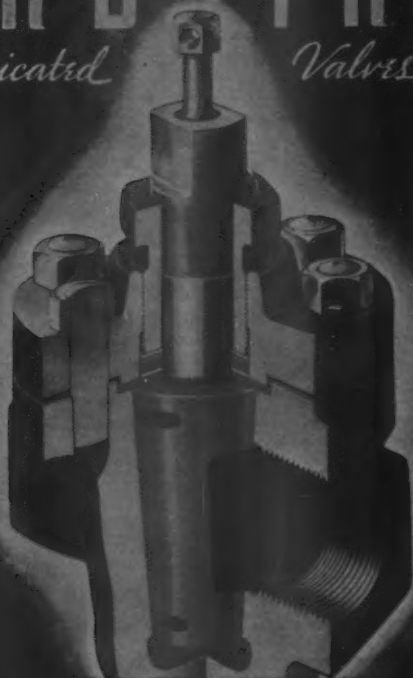
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NORDSTROM

Lubricated Valves



STANDARD TYPE

EMCO-NORDSTROM TYPE

HYPERSEAL TYPE

HYPERSEAL TYPE

"Sealdport" Lubrication
PATENTED

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Public Utilities Fortnightly



VOLUME XXI May 12, 1938 NUMBER 10

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Q This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

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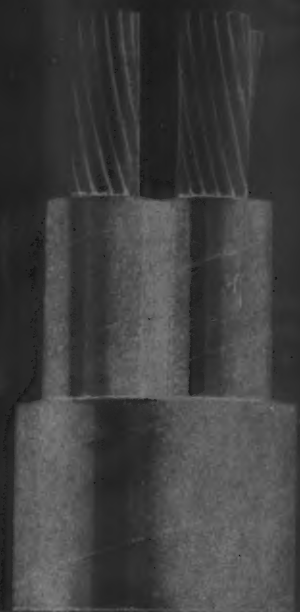
Publication Office CANDLER BUILDING, BALTIMORE, MD.
Executive, Editorial, and Advertising Offices MUNSEY BUILDING, WASHINGTON, D. C.

PUBLIC UTILITIES FORTNIGHTLY, a magazine dealing with the problems of utility regulation and allied topics, including also decisions of the regulatory commissions and courts, preprinted from *Public Utilities Reports, New Series*, such Reports being supported in part by those conducting public utility service, manufacturers, bankers, accountants, and other users. Entered as second-class matter April 29, 1915, under the Act of March 3, 1879. Entered at the Post Office at Baltimore, Md., Dec. 31, 1936; copyrighted, 1938, by Public Utilities Reports, Inc. Printed in U. S. A.

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MAY 12, 1938 4

OKONI

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Pages with the Editors

IF there were ever any truth or justification in the old saying that "The King can do no wrong," it would almost follow that in a democracy the elected representative government of the people could arrogate to itself a similar claim of privilege. Viewed in this light, perhaps the quotation, "*Vox populi est vox Dei*," is simply a liberal democratic paraphrase of "The King can do no wrong."

BUT we always have our doubting Thomases; and in a democracy with a free press it is not surprising to see doubting Thomases speak out with forthright insistence. And what does the "people's government" do under such circumstances?

WELL, so far, under the prevailing administration here in America nothing definite has been done about the opposition press, but we were very much interested in the remarks of Senator Minton (D.) of Indiana recently made in the course of a radio debate on the controversial bill to reorganize administration agencies. The Indiana Senator, who is always described as a faithful and devoted follower of the New Deal, told his radio listeners: "It is chiefly by means of the radio that the point of view of the administration in Washington on anything it is doing, or proposes to do, is brought to you, since 98 per cent of all the metropolitan newspapers are opposed to the administration and do not hesitate to misrepresent it. You found that out in the last election. If you want to



MILLARD MILBURN RICE

He finds that propaganda of the people, by the people, and for the people is propaganda just the same.

(SEE PAGE 579)

know the truth about things going on in Washington you won't find it in the metropolitan newspapers."

THIS jibes pretty well with certain movements already afoot to divorce the radio broadcasting industry from the press. The press, we take it, cannot be sufficiently "impressed" with the administration viewpoint to win the applause of the administration. Is there an implication here that perhaps the radio broadcasting industry can thus be "impressed"? The FCC's power over radio broadcasting licenses (renewable only at six months' interval on showing of "public convenience and necessity") raises an interesting question in this respect.

BUT to continue with the radio debate of Mr. Minton, it seems that the chief question about the reorganization bill, according to the Hoosier Senator, was "How can the President do it (reorganize 134 commissions and bureaus) if Congress can't?" The answer is simple, according to Mr. Minton: "The President and his executive staff are not a debating society, while Congress is a debating society, and sometimes resolves itself into a 'talkathon.'"

WE take it that Mr. Minton, who was elected by the people to membership in this "debating society," is not entirely in favor of



C. EMERY TROXEL

Try and tell gas and electric sales executives that they have a monopoly.

(SEE PAGE 588)

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PLY
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slightly high
off Federal T
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The Plym
biggest of
priced car
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vibration
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INVEST IN "THE CAR
THAT STANDS UP BEST"



BIGGEST OF THE 3

The Plymouth "Roadking" is the biggest of the three leading lowest-priced cars—nearly 7" longer than one; more than 16" longer than the other. The new Plymouth steers and handles easier—and has a sensational new ride.

GREATER COMFORT

The new Plymouth's "live" rubber body mountings and airplane-type shock-absorbers soak up bumps, vibration. Noise is hushed with "radio studio" sound-proofing.

FINER PERFORMANCE

All Plymouth models have the big, 82-horsepower, "L-head" engine—giving both brilliant performance and outstanding economy. Owners report 18 to 24 miles on gas... lowest oil consumption.

LOWER UPKEEP

Plymouth's upkeep costs are considered the lowest of all low-priced cars due to important features like 4-ring pistons, Hypoid rear axle, valve seat inserts and Floating Power engine mountings.

MORE SAFETY

The new Plymouth's double-action hydraulic brakes are the safest type made, and its all-steel body has a Safety Styled interior!

STANDS UP BEST

Plymouth's better engineering makes it "stand up best"! Drive this big, new Plymouth. Phone your nearby Plymouth dealer. PLYMOUTH DIVISION OF CHRYSLER CORPORATION, Detroit, Michigan.

TUNE IN MAJOR BOWEN'S AMATEUR HOUR, C.B.S. NETWORK, THURS., 9-10 P.M., E.S.T.

PLYMOUTH BUILDS GREAT CARS **THE "ROADKING" THE "DE LUXE"**

it, as presently conducted. He wants action instead of parliamentary fumble-fumble which, as Messrs. Hitler and Mussolini have pointed out, is perhaps one "weakness" of democracy. They "talk, talk, talk," said Il Duce of Parliaments sometime ago, "but they do nothing."

WELL, if there is too much opposition in the press and even in the Congress to suit the "people's government," what is the latter to do? After all, the government cannot be on the radio all the time. The answer would seem to be in government propaganda. We all know it exists—always has to some degree.

BUT how much government propaganda is there? How much does it cost? What form does it take? Is it sugar-coated? These are interesting questions which MILLARD MILBURN RICE, in his article on "The 'People's' Propaganda" (beginning page 579), endeavors to answer.

MR. RICE, a newcomer to FORTNIGHTLY pages, is a resident of near-by Maryland whose articles on business, political, and economic subjects have heretofore appeared in numerous national magazines, including *Collier's*, *Saturday Evening Post*, *Nation's Business*, *Forbes*, *Barron's*, *Literary Digest*, and others. His early training was as a certified public accountant, but since 1921 Mr. Rice has preferred to follow literary pursuits. He has done special research work for Brookings Institution.

WITH all the current discussion about the monopoly and the evils thereof, folks are prone to forget that in the strictest economic sense there is only one real monopoly and that is money itself, which cannot be duplicated except by counterfeit. In all other fields of enterprise, the general competition of different commodities for the same consumer dollar is often just as keen as the rivalry between producers of the same commodity—a rivalry which we think of as competition in its usual sense.

In other words, if you corner beef, folks will eat pork; if cotton goes too high, wool will get the orders. And nowhere is this economic truth more clearly demonstrated than in the field of utility service—a field which economists sometimes refer to as a "natural monopoly." In this issue (beginning page 588) PROFESSOR C. EMERY TROXEL explains the increasing competition between gas and electric service for the same consumer dollars. The rivalry is perhaps more parallel than even the contest between beef or pork, cotton or wool, for it is not only the same industrial consumer that the gas and electric utility men are seeking, but the same type of business—the order to do the same technical job, whether by gas or by electricity.

MAY 12, 1938



HENRY EARLE RIGGS

When we have finally dammed, ditched, and drained the whole country, will it all still be worth while?

(SEE PAGE 598)

DR. TROXEL (Ph.D., Iowa '35), who has previously written for the FORTNIGHTLY, is a teacher and writer of considerable experience in the field of public utility regulation. He is at present associate professor of economics at Wayne University, Detroit, Mich.

WE conclude in this issue the four-part series of articles on the usefulness of federally financed power plants, written by HENRY EARLE RIGGS, president of the American Society of Civil Engineers, and professor emeritus in the subject of engineering at the University of Michigan.

AMONG the important decisions preprinted from *Public Utilities Reports* in the back of this number, may be found the following:

THE recent decision of the United States Supreme Court upholding the registration requirements of the Public Utility Holding Company Act appears on page 465.

A FEDERAL court decision applies the National Labor Relations Act to a local electric utility. (See page 478.)

FINDINGS by a commission must be based on adequate evidence. (See pages 489, 509.)

THE next number of this magazine will be out May 26th.

The Editors

5 P. M.—FRIDAY

-AND YOU'VE ENJOYED YOUR WEEK



Vivid and vital each night at 5—after a full day's work.
Fresh and alive each Friday at 5—after a full week's work. That's your reward when your office is equipped with Remington Noiseless typewriters. And how important that is to everyone, now that the outdoors beckons.



MAKE THE FIVE O'CLOCK TEST

THE REMINGTON NOISELESS works in a whisper—saving nerve strain—eliminating noise strain. Without obligation, make the 5 o'clock test in your office. Use the Remington Noiseless free for this test period. Learn how much more work can be done when nerve shattering typewriter clatter no longer disturbs. See how cheerfully you wind up your busiest days with animation to spare. After all, **typewriter noise** tires you more than office work.

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in 1937 than any other make

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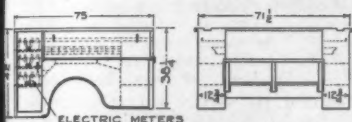
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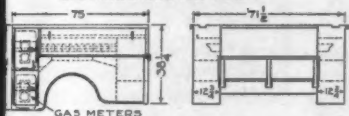
PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 465-528, from 22 P.U.R. (N.S.)

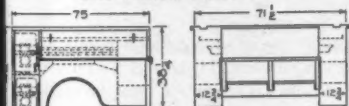
THE BIGGEST PACKAGE WE HAVE EVER OFFERED FOR THE MONEY



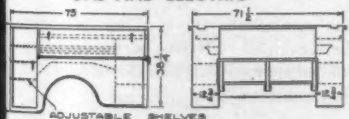
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GAS METER BODY



GAS AND ELECTRIC



GENERAL SERVICE BODY



OPTIONAL EQUIPMENT

WITH THIS UNIVERSAL PUBLIC UTILITY BODY designed to meet five separate service requirements, we can offer a price based on the manufacture of 1000 units. Because of the demand for this type of unit and by thus standardizing our design, we are able to reduce our costs.

The horizontal compartments of the 4460 body feature adjustability of dividers and flexibility of tray requirements. Vertical compartments at the forward end add to make a total bin space of 30 cubic feet. Open space in the center of the body is available for the full length. The total floor space is 24 square feet.

Adequate provision is made for the protection of electric, gas, or water meters as the service requires. The shelves on which they are carried are fully adjustable. The compartments of the General Service body are designed to carry fixtures and tools for appliance repair work.

Electric meters of the conventional or socket type are set on moulded rings and held in position by rubber straps as shown.



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"There never was in the world two opinions alike."

—MONTAIGNE



JOHN E. MILLER
U. S. Senator from Arkansas.

"Sometimes I think we pay more lip service to flood control than to any other kind of project which may be suggested."

JOSEPH H. WILLITS
Dean, Wharton School of Finance and Commerce, University of Pennsylvania.

"We need to remember that it is possible to arrive at the totalitarian state by awkwardness as well as by malevolence."

DONALD R. RICHBERG
Presidential adviser.

"I have arrived at that Alpine height of wisdom where I am aware that no one man knows or can know how all industry and trade should be organized and operated."

WILLIAM GREEN
President, American Federation of Labor.

"The only way the railroads can be saved, the interest of the workers maintained, and service be kept up for the good of the country is through government ownership."

MAURY MAVERICK
U. S. Representative from Texas.

"My idea is that all of them [TVA directors] should be requested to dismount from their high-horses and talk with us poor, benighted fellows in order that we may be enlightened."

JOSIAH W. BAILEY
U. S. Senator from North Carolina.

"Men will not expose their savings to a competition that in its very nature is ruinous. If there is a field which the government intends to take over, it must be marked off at once."

LEO WOLMAN
Professor of Economics, Columbia University.

"In the field of labor relations, public policy on wages and hours, and perhaps even on collective bargaining, may make impossible the adjustment of private business to prevailing economic conditions."

GEORGE W. NORRIS
U. S. Senator from Nebraska.

"I think the Federal Trade Commission made one of the most memorable, fair, and honest investigations of private power activities ever made in history, and it will stand many years as a landmark."

W. D. McFARLANE
U. S. Representative from Texas.

"The existence of the present radio monopoly is due to the action of the Federal Communications Commission both by their acts of omission and commission as shown by the records of their own department."

Burroughs

NEW ELECTRIC DUPLEX CALCULATOR

GRAND TOTAL
or the Net Result

Any amount in lower dials may be added to, or subtracted from, the amount in upper dials by touching the plus key or minus key.

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or the Result of a
Single Calculation



Direct to the Net Result!

This new Burroughs Electric Duplex Calculator—complete with direct subtraction and two sets of accumulating dials—saves needless steps in handling any calculating job. The lower dials show the result of each individual calculation; the upper dials show the grand total, or net result. Thus the complete calculating job can be done on this remarkable machine with one handling of the figures. This means a surprising saving in time, money and effort. For a demonstration, or for complete information, telephone the local Burroughs office.

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THERE'S A BURROUGHS CALCULATOR FOR EVERY TYPE OF CALCULATING

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WALTER M. PIERCE
U. S. Representative from
Oregon.

"There are certain monopolies which would willingly unite with the private utilities to obstruct transmission of this [Bonneville] power in order to maintain unimpaired the high rate structure of the private utilities and to prevent the establishment of another power 'yardstick.'"

C. O. G. MILLER
President, Pacific Lighting
Corporation.

"There is the anomalous situation wherein present [utility] taxes are used to build plants which are not only tax free but probably will have deficits, creating the need for additional subsidies from taxes which must be collected by further imposts upon the remaining taxpayers."

PAUL A. WALKER
Member, Federal Communications
Commission.

"The monopoly of the telephone business in the American Telephone and Telegraph Company has so long continued that it is more practicable to effect justice for the public in reasonable and satisfactory telephone services and charges through regulation, than by an attempt to destroy the monopoly feature of the telephone industry."

J. J. PELLEY
President, Association of American
Railroads.

"... during . . . 1936, 3,626 persons were killed in the United States by being struck or run over by trains. Had the railroads been required by law to run a larger number of shorter trains to handle their business, the number killed would have been increased almost in direct proportion to the number of additional unnecessary train miles operated."

ALBEN W. BARKLEY
U. S. Senator from Kentucky.

"The Federal government has no desire or intention to place unnecessary handicaps in the way of legitimate business, whether it is large or small, but the man who does not recognize in this complex age the duty and obligation of the government to protect legitimate business from unfair methods and practices designed to foster monopoly is dwelling in a world of unreality."

GEORGE A. DONDERO
U. S. Representative from
Michigan.

"If we are ever going to reduce Federal expense, if we are ever going to make income balance outgo, we better get back on a sound business basis and not appropriate money until we have a reasonably safe enterprise and have contracts signed, or at least a market ready, to buy this [Bonneville] power on which we can predicate the expenditure of three and a half million dollars."

BERNARD BARUCH
Presidential adviser.

"There are some holding companies in the utilities that resulted in overcapitalization or watering of values on which they endeavor to make the public pay. These things are abuses and should be ruthlessly regulated out of our economy. But there are other holding companies that were set up merely for convenient and legitimate management of purely legitimate business. Of course, they should be supported and encouraged."

*"Oh Boy!
What a Machine!"*

No back-breaking
hand levers on the
LINK-BELT

Speed-o-Matic

**CRAWLER AND
LOCOMOTIVE
— SHOVELS —
DRAGLINES—CRANES**



● Today operators all over the country are shouting the praises of the Link-Belt Speed-o-Matic. The easy, hydraulic-pressure lever controls have made operation like play instead of work. It results in . . . much speedier operation . . . elimination of operator fatigue . . . less wearing parts, less trouble . . . greatly increased output

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*"... and with the gentleness
of a strong man."*



Lowering pipe is no job for a lightweight . . . it takes power to handle the job smoothly without danger to welds or seams . . . to prevent damage that might result in leaks.

But Cletracs have the power and the ease of handling that places this power under finger tip control.

Cletracs are built for the tough jobs . . . to do the heavy work easier, more eco-

nomically, better. Examine a Cletrac . . . its rigid main frame, its sturdy track frames, the dead axle, the controlled differential steering, the accessibility, the soundness of every construction detail. There's a size for every job . . . fifteen models from 22 to 94 horsepower, either gasoline, tractor fuel, or Diesel powered, and with a complete line of working equipment.

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Cletrac

Crawler Tractors

The only tractors with controlled differential steering that keeps both tracks pulling at all times . . . on the turn as well as on the straightaway.

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TWO WASHING MACHINES *show this difference in* WEAR-ON-CLOTHES



These two balls of lint were made by gathering the lint washed out of clothes by two different washing machines, in the course of an hour. They show dramatically the difference in wear-on-clothes produced by the two machines under test.

However, Electrical Testing Laboratories actually measures this wear much more accurately. The clothes used in each machine on test are carefully weighed before and after washing to determine the loss of material suffered by the cloth. And before each weighing, each batch of clothes is air conditioned for enough time so that moisture will not affect the results.

By such methods, E. T. L. obtains the **FACTS** of performance and quality on products tested. Often tests can be tailor-made to fit any problem in buying or selling.

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TESTING
LABORATORIES**

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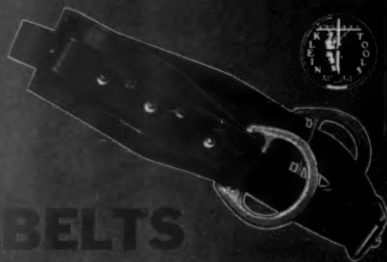
Why Davey Service?

- Available Everywhere
- Skillful
- Economical
- Preferred by Tree Owners

Always use dependable Davey Service

THE DAVEY TREE EXPERT CO. KENT, OHIO

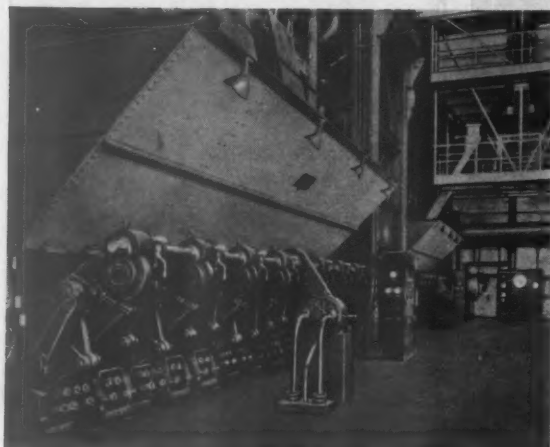
DAVEY TREE SERVICE



Where life depends on a strap or belt, leather no compromise can be made in quality. Klein's leather is first quality, selected for its strength and durability, and checked for chemical analysis and tensile strength. All hardware is drop forged from bar steel, individually tested to 1500 lbs. Stitching is done with hot waxed genuine Irish linen thread, lock stitched. Riveting by hand with solid copper rivets reinforces all necessary points. Standard of quality with linemen and safety engineers everywhere.

Established 1857 **KLEIN'S** Chicago, Ill. U.S.A.

These Plants **KNOW** TODAY'S TAYLOR STOKER



SOME RECENT TAYLOR STOKER INSTALLATIONS

Aluminum Company of America
Anderson, City of, Indiana
Austin, City of, Minnesota
Ball State Teachers College
Baltimore City Hospital
Brooklyn Navy Yard
Castanea Paper Company
Chevrolet Motor Company
Chrysler Corporation
Collins and Alkman Corporation
Columbus, City of, Ohio
Consolidated Paper Company
Delfiance Milk Products Company
Detroit Edison Company
Fisher Body Corporation
Fort Howard Paper Company
Galion, City of, Ohio
General Motors Corporation
Great Northern Paper Company
Hannibal, City of, Missouri
Holland, City of, Michigan
Hudspeth Brewing Company
Iowa Electric Light & Power Company
Jonesboro, City of, Arkansas
Libbey-Owens-Ford Glass Company
Marshfield, City of, Wisconsin
Maybury Sanatorium
Merck and Company
Michigan Carton Company
Muncie Products Company
Muscatine, City of, Iowa
Mutual Chemical Company
Pacific Mills
Painesville, City of, Ohio
Pennsylvania Electric Company
Pennsylvania Railroad Company
Philadelphia Electric Company
Picatinny Arsenal
Pilgrim State Hospital
Pittsburgh Plate Glass Company
R. J. Reynolds Tobacco Company
Raleigh Wyoming Mining Company
Rhinelander Paper Company
Richland Center, City of, Wisconsin
Rochester, City of, Minnesota
Rock Hill Printing & Finishing Company
St. Elizabeth Hospital
Sloan-Blaehon Corporation
Ternstedt Manufacturing Company
The Liquid Carbonic Company
The National Superior Company
The Timken Roller Bearing Company
Union Biochemistry
Union Mills Paper Manufacturing Company
United Illuminating Company
University of Iowa
Vassar College
Vineland, Borough of, New Jersey
Virginia Electric & Power Company
Walter E. Fernald State School
White Sewing Machine Company

THROUGH constant research and development work, our engineers are continually improving Taylor Stokers to *anticipate your demands* for reliable, low cost steam generation. • The Taylor Stoker, as is evidenced by these important installations, is well worth your careful investigation. • Call in one of our representatives—and get the **FACTS!**

**The A-ECO
Taylor Stoker
UNIT**

A-E-CO PRODUCTS: Taylor Stokers,
Water Cooled Furnaces, Ash Hoppers,
Le-Hot Heats, Marine Deck Auxiliaries,
Hole-Shaw Fluid Power Pumps, Motors
and Transmissions.

AMERICAN ENGINEERING COMPANY



PHILADELPHIA, PA. • IN CANADA: AFFILIATED ENGINEERING CORPORATIONS, LTD., MONTREAL, P. Q.

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The PITTCO STORE FRONT CARAVAN

Returns!



Another chance to tie up with this potent builder of new lighting customers! Another opportunity to sell more current by showing the merchants and property-owners in your territory the advantages of modern, business-building store front lighting and design.

The Pittco Store Front Caravan, with twelve scale models of modern, properly illuminated store fronts, is going to cover the entire country again. If it visited your territory on its first trip, you'll know how helpful it was to you in educating your prospects to a better appreciation of adequate store front illumination.

This time, the Caravan will cover your territory more broadly than before. Having presented its store front exhibit in all the metropolitan areas on its previous tour, it will this time present showings of its scale models in the more important *smaller* communities throughout your territory . . . giving every merchant and every property owner a chance to see it.

Watch for the return of the Pittco Caravan . . . and tie up with it in your sales efforts. Your nearest Pittsburgh Plate Glass Co. branch can give you specific information as to when it will revisit you.

Paint * **PITTSBURGH** * *Glass*
PLATE GLASS COMPANY

"There's No Economy Unless There's Efficiency"



CHEVROLET TRUCKS

cut costs by doing *more work per dollar*



Alert business—everywhere—seeks methods of achieving its aims at reduced costs.

In thousands of such businesses, large and small, Chevrolet trucks have more than met the test of efficiency. *They do the work for less money.* Truck users have found that Chevrolet trucks reduce transportation and delivery expenses. That is why business men have bought more Chevrolet trucks in the last five years than any other make of truck in the world. They know that Chevrolet trucks cost little in the beginning—and cost less in the end.

CHEVROLET MOTOR DIVISION, General Motors Sales Corporation, DETROIT, MICHIGAN

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What's back of
COLLIER'S SERVICE?



second—

KNOWLEDGE . . .

Knowledge born of Experience, which, for nearly half a century, has made the name "Collier" synonymous with Street Car, Bus, Elevated, Subway and Suburban advertising—a Knowledge sensitive to modern merchandising requirements which satisfies advertisers and enables us to hold them for long periods as active advertisers in your cars.

BARRON G. COLLIER, Inc.

745 FIFTH AVENUE, NEW YORK



***Whether You Buy A Tankful Of Gasolene Or
A Carload Of Oil—You Can Be Sure That
CITIES SERVICE PRODUCTS Are Unsurpassed!***

THE QUALITY of Cities Service gasolenes, oils and greases is guarded every step of the way from the oil well to you. For Cities Service is a completely integrated unit in the oil industry, engaged in all phases of petroleum operation... production, transportation and refining. The finished products, backed by 74 years of refining experience, reach you through 15,000 reliable outlets. The Cities Service emblem is your guarantee of dependable products and efficient, courteous service.

CITIES SERVICE



Serves A Nation!

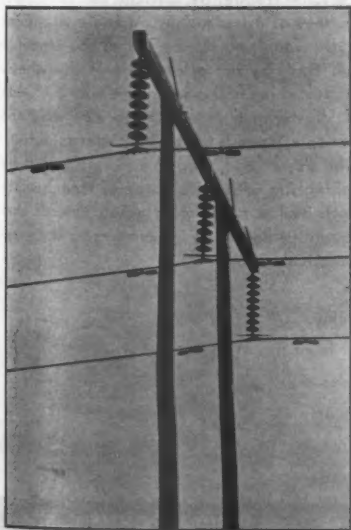
"Here she comes, Big Boy
...ready for a l-o-n-g ride"



EVEN THE ground man recognizes the value of A. C. S. R. vibration control. He knows that, regardless of conductor material, a line's a better line when it's protected by Stockbridge Vibration Dampers. With the conductors being Aluminum Cable Steel Reinforced, this line will be on the job long after he's gone where good grunts go.

A.C.S.R. materials and standards have passed, with honors, the most rigid of tests — years and years of actual service, exposed to heat and high winds, cold, sleet and other abnormal loadings. Promises of performance are based on known records of other lines.

Hi-line or rural line, there is an A.C.S.R. conductor which offers the most economical combination of strength and conductivity. Let our engineers assist you on overhead construction problems. ALUMINUM COMPANY OF AMERICA, 2138 Gulf Building, Pittsburgh, Pennsylvania.



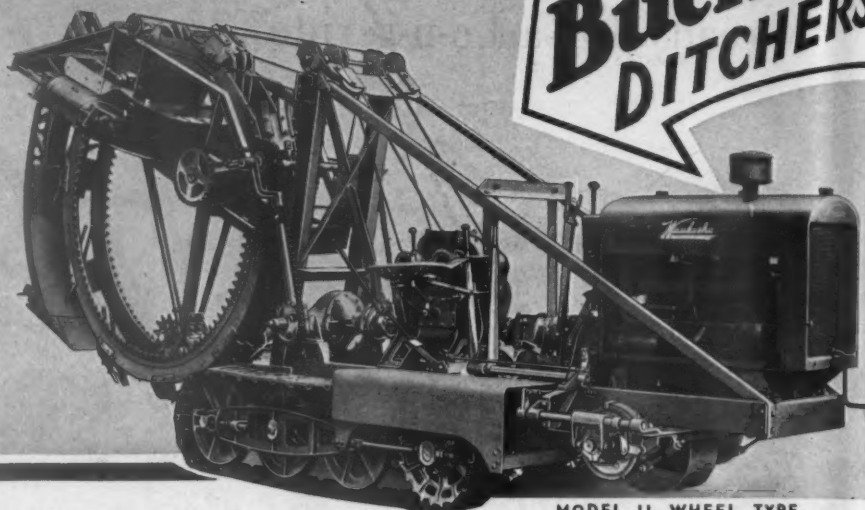
A·C·S·R

FOR RURAL LINE

FOR POWER TRANSMISSION

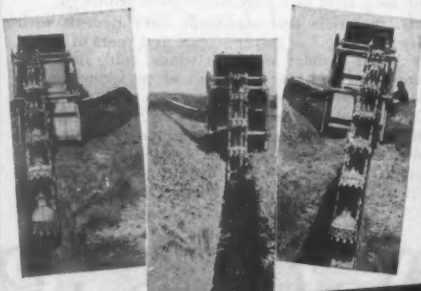


Investigate the advantages of **Buckeye DITCHERS**



MODEL 120 & 160 WITH SHIFTABLE BOOM . . CHAIN AND BUCKET TYPE

The latest boom type Buckeye ditchers have a wide range of usefulness. Trench 16" or more wide and to 12' 6" deep can be dug in hard-to-get-at places or on open country right-of-way, with equal facility. Digging boom may be shifted to right or left allowing the machine to cut trench within 4" of a curb or 10" from poles, buildings or other obstructions.



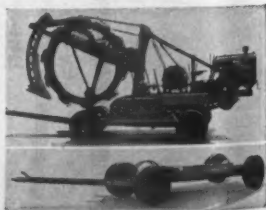
**ENGINEERING DESIGN as
MODERN as TOMORROW**

**MODEL 11 WHEEL TYPE.
SMALL . FAST . EASILY HANDLED.**

THEY SIMPLIFY YOUR DIFFICULT DITCHING JOBS

Short runs of small trench, lines that run close to obstructions, scattered jobs that call for moving the ditcher frequently, difficult soil conditions and a variety of other mean-to-handle situations are greatly simplified by the use of the Model 11 Buckeye. Built by the originators of the wheel-type ditcher, this small machine — only 52" wide over-all, digs trench from 10" to 22" wide and to 5½' deep at speeds up to 416" per minute. It has the power and rugged strength to handle any ditching job within its range of trench width and depth and a range of digging speeds that enables you to keep any job moving at the maximum practical speed.

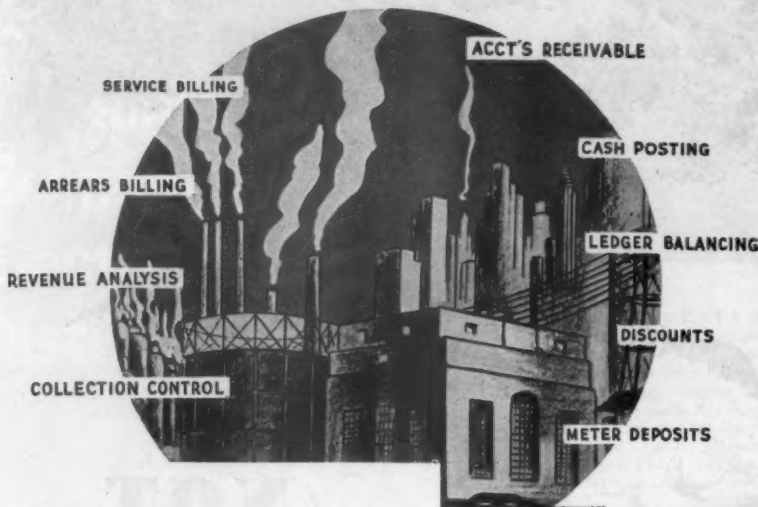
Quickly
moved from
one job to the
next on
Buckeye
built trailer.



THE BUCKEYE TRACTION DITCHER CO.

FINDLAY, OHIO, U. S. A.

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For complete and more informative records

❶ In re-equipping your accounting department, don't consider only your current Service Billing needs. This type of billing comprises only 3% of present day customer accounting costs.

❷ Investigate the punched card method of accounting which, in addition to Service Billing, will facilitate the handling of Cash Posting, Ledger Balancing, Discounts, and Arrears and Merchandise Billing. This method will also enable you to control Accounts Receivable, Meter Deposits and other important functions.

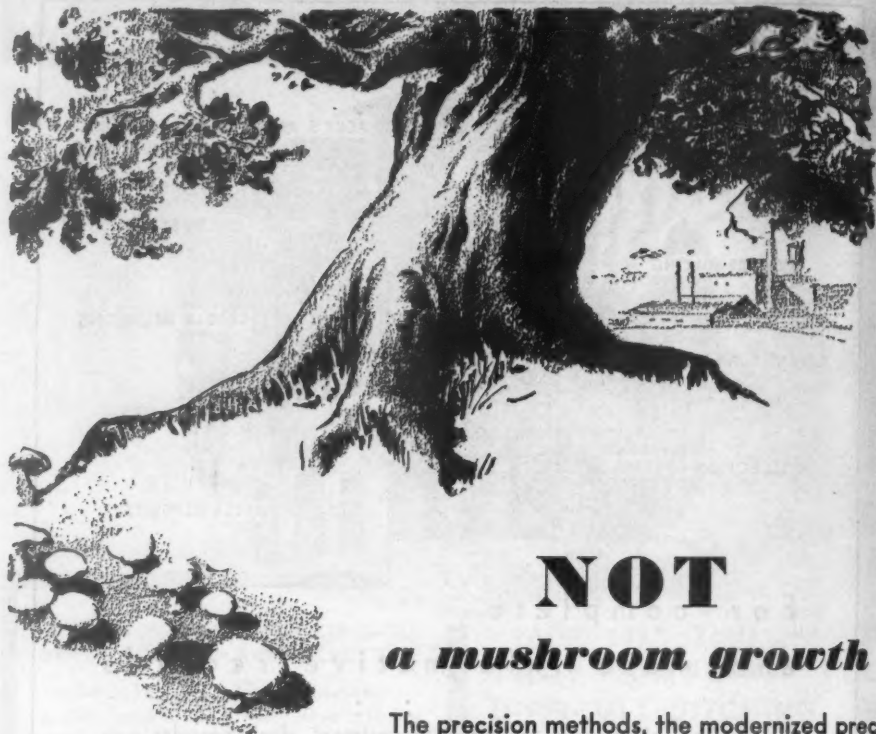
❸ This modern electric Accounting method offers complete and more informative records to the customer, the district offices, the customer service department and the management. Write for complete information today.

INTERNATIONAL BUSINESS MACHINES CORPORATION

WORLD HEADQUARTERS BUILDING
590 MADISON AVENUE, NEW YORK, N. Y.



BRANCH OFFICES IN
PRINCIPAL CITIES OF THE WORLD



NOT *a mushroom growth*

The precision methods, the modernized precision machine tools, improved gauges and other refinements in manufacturing developed by Neptune in making Trident and Lambert Water Meters were not adopted "overnight." They are the climax of 46 years of experience and of pioneering in the art of making better water meters better . . . and better . . . and better.



NEPTUNE METER CO.—THOMSON METER CORP.
50 WEST 50th ST. (Rockefeller Center) NEW YORK CITY
NEPTUNE METERS, LTD., 345 Spadina Ave., Toronto, Can.

FOR INTERCHANGEABILITY . . . FOR QUALITY . . . PICK LAMBERT &



TRIDENT

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For Permanent Economy in Electrical Distribution



● WHEREVER electrical conduit must be "concreted-in"—the light weight and long lengths of J-M Transite Korduct cut material and labor costs, assure immediate installation savings.

SEVERAL YEARS AGO, Johns-Manville introduced Transite Electrical Conduit—an asbestos-cement material so inherently strong and permanent that it ended the expense of "concreting-in" on many underground duct systems. And provided virtual freedom from maintenance whether installed under or above ground.

Today, its companion conduit . . . Transite Korduct . . . is lowering electrical distribution costs—and *keeping them low*—on jobs where concrete casings *must* be used.

Differing from Transite Conduit only in its lesser wall thickness, Korduct offers the

same basic permanence, the same freedom from maintenance.

Its lighter weight and long lengths reduce both material and handling costs. Hence on multiple-duct systems, in tunnels, bridge structures, dams—or wherever the service calls for "concreting-in," Transite Korduct is your logical conduit choice.

Making new conduit installations . . . replacing existing materials? Be sure you get the new data-sheet manual on Transite Korduct. It also includes new data on Transite Conduit. Write Johns-Manville, 22 East 40th Street, New York City.

**WHEREVER
CONDUIT
MUST BE
"CONCRETED-IN"**



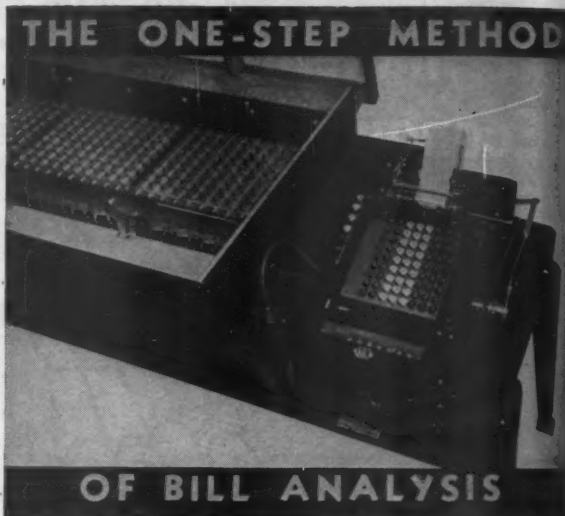
Johns-Manville TRANSITE KORDUCT

ONE-STEP METHOD OF BILL ANALYSES

THE ONE-STEP METHOD

R & S ONE-STEP METHOD gives complete customer usage data currently at lower cost than periodic studies. Controlled accuracy eliminates re-checking and re-analyzing necessitated by other methods. Direct compilation from your billing register, or other customary record, eliminates advance preparation, field work, and interruption in your regular routine.

R & S Bill Frequency Analyzer is the practical answer in making complete, accurate consumption analyses. Provides full information in a single step at about 50% less than the cost of former methods.



R & S Bill Frequency Analyzer: developed for our Utility Rate Service. The kw-hrs. billed are entered on the adding machine keyboard. A tape is prepared of all items and a consumption total accumulated which serves as a control. At the same time—through this single operation—the bill cost for each kw-hr. step is made by the electrically controlled accumulating registers.

PROGRESSIVE ELECTRIC CO. 700 W. A. B. Building CHICAGO, ILLINOIS BILL PREPARED 5-17-38 1044				
CUMULATIVE				
Kw-Hrs. Per Bill	No. Bills	Consumption In Kw-Hrs.	No. Bills	Consumption In Kw-Hrs.
0	390		390	
1	209	209	599	209
2	1119	2039	1718	2448
3	370	1110	2088	3558
4	214	1859	2302	4707
5	374	1870	4576	13807
	3798	82798	4576	13807
		2981	8797	29806
		80784	15145	99480
		4527	15648	94947
			28050	198987
			26623	205299
			4625	345498
				353134
				564044
				484
50	212		130560	
51	13	413	130587	
52	235	178	130748	
53	10	456		250083
54	817	10182	140723	2506934
55		10324	150831	2507000
56		413	130833	
57	178	9800	130935	
58	161	308	130935	
59		6076		2513588
60	9	186		
61		6529		
62				
63				
64	102			

The ONE-STEP METHOD is a simple, accurate basis for rate making. The number of bills from the machine multiplied by kw-hrs. gives the total consumption in each block. From this record cumulative totals of bills and kw-hrs. are prepared through each step.

A continuance of frequent rate changes—the necessity of checking load-building activities—the pressing need for current data on customer usage—are but a few of the reasons many Operating and Holding Companies are using R & S ONE-STEP METHOD to analyze and compile information required for scientific rate making. They have not only reduced the costs on this work, but have obtained monthly or annual bill-frequency tables in a few days instead of weeks and months.

It is to your advantage to investigate R & S service on Current and Special Bill Analyses. Let us prove the economy of the ONE-STEP METHOD by an estimate on your requirements.

Recording & Statistical Corporation

Utilities Division

102 Maiden Lane, New York, N. Y.

Boston

Chicago

Detroit

Montreal

Toronto

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This

From the Early Period
of the Telegraph to the present
remarkable development in the field of Electricity

KERITE

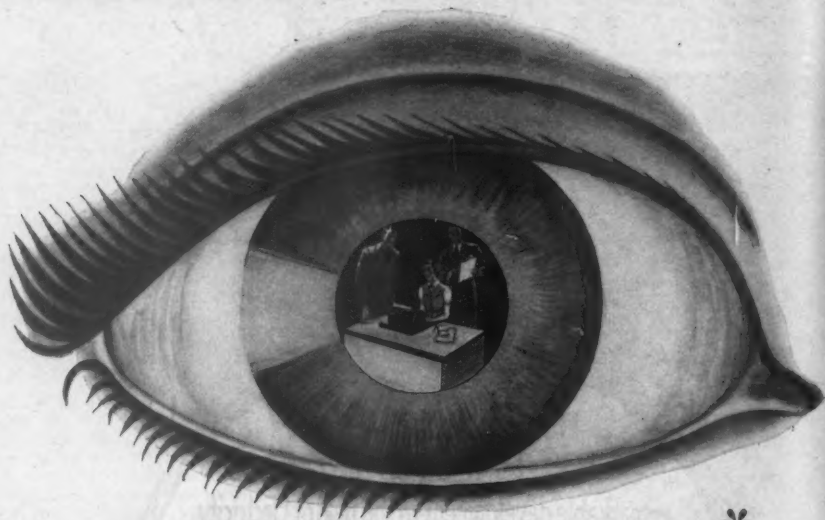
has been continuously demonstrating the
fact that it is the most reliable and
permanent insulation known

THE KERITE^{INSULATED} WIRE & CABLE COMPANY INC

NEW YORK CHICAGO SAN FRANCISCO



"IT OPENED MY EYES..."



THE DESK TEST*

Showed us how to get better letters . . . lower typing costs!"

AN EYE-OPENER wherever it is made! THE DESK TEST is proving to thousands of executives that better typing *is* possible . . . that, with

Easy-Writing Royals, their own secretaries and operators can do letter-perfect work faster, with less effort. Follow the lead of THE DESK TEST.

* The DESK TEST is a fact-finding trial. It costs nothing, proves everything. Phone your Royal representative for information, or use the coupon below.

ROYAL

**WORLD'S NUMBER 1
TYPEWRITER**

World's largest company devoted exclusively to the manufacture of typewriters.



Copyright 1938, Royal Typewriter Company, Inc.

GET A 10-DAY DESK TEST FREE!

Royal Typewriter Company, Inc.
Department WPU-5128
2 Park Avenue, New York City.

● Please deliver an Easy-Writing Royal to my office for a 10-day FREE DESK TEST. I understand that this will be done without obligation to me.

Name
Firm Name
Street
City State

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MORE AND MORE IN DEMAND



For Breaking, Digging, Drilling, Tamping and Driving

- Lower in first cost because they eliminate expensive auxiliary equipment . . . offering additional opportunities to save time and money each time they are used . . . Barco Portable Gasoline Hammers are classified as "indispensable" by a wide variety of industries.

BARCO MANUFACTURING CO.

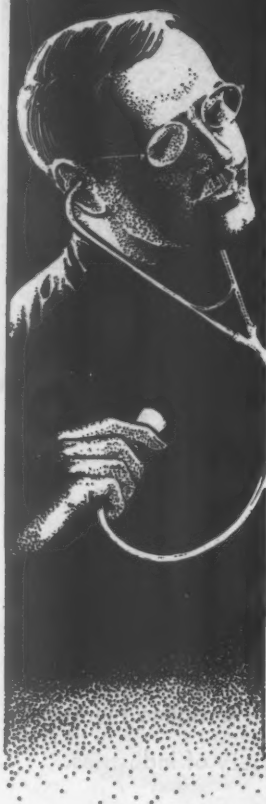
1803 W. WINNEMAC AVE.

CHICAGO, ILL.

BARCO *portable* **GASOLINE
HAMMER**

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YOU'RE THE DOCTOR



For healthy water supply and sewage systems . . . prescribe Darling Valves and Fire Hydrants!

Your choice of valves and fire hydrants can make a big difference in the health and well-being of the entire system. Choose the right valve and hydrant—and you will avoid plenty of trouble!

Darling Valves and Fire Hydrants are designed and built to do a superlative job. Darling users will tell you that Darlings *save money and worry*—every day.

Darling representatives have the experience and skill to solve your particular problems. Get in touch with our nearest representative today.

DARLING VALVE & MFG. CO.
Williamsport, Pa.

Representatives in:

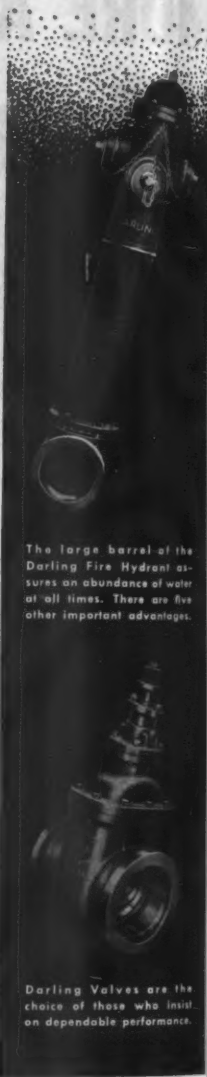
New York
Philadelphia
Pittsburgh

Houston
Oklahoma City
Toledo

Evanston, Ill.

DARLING

GATE VALVES AND FIRE HYDRANTS



The large barrel of the Darling Fire Hydrant assures an abundance of water at all times. There are five other important advantages.

Darling Valves are the choice of those who insist on dependable performance.

The large barrel of the Darling Fire Hydrant assures ample water supply at all times.

Experience favors Darling Valves.

For sewage disposal and filtration plants, Darling Gate Valves are different in operation—more dependable in performance.

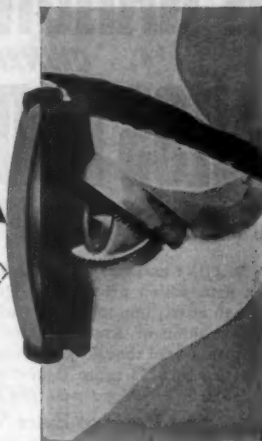
SUPER~DREDNAUT *DEEP CURVE* LENSES

PROVIDE

Added Protection...

THIS DEEP CURVE

1. Compels the Glancing Blow
2. Supports the Heavy Blow as does the arch in a bridge.
3. Prevents the glass from being driven into the eyes if lens should break by a terrific blow.



ONLY SUPER-DREDNAUT GOGGLES EMBODY All 3 of the Following Features:



Self-Adjusting nose bridge, which automatically adjusts itself comfortably to any width or size of nose.

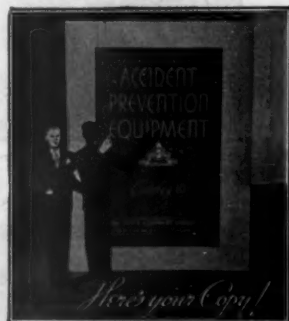
Non-Rubber headband, which contains no rubber, yet when properly adjusted it will maintain the desired tension and stay adjusted indefinitely.

It cannot be injured by over-

extension and is not affected by moisture, perspiration, oil or grease.

Super-Drednaut lenses, DEEP CURVED for ADDED STRENGTH have proven through tests, long wear and hard usage that they provide a greater strength, greater resistance to hard blows than any other form of lenses, which means MAXIMUM eye protection and fewer eye injuries.

Send for a pair of Super-Drednaut Goggles TODAY and put them to the test.



THE SAFETY EQUIPMENT SERVICE COMPANY

Buell W. Nutt, President

:-:

:-:

1230 St. Clair Avenue, Cleveland, Ohio

Manufacturers of a General Line of Accident-Prevention Equipment

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IN NATION-WIDE TRUCK POLL

OWNERS OF LOW PRICE TRUCKS

GUESS DODGE PRICE UP TO \$135 MORE

...Yet Dodge is Priced with the Lowest!

A RECENT national poll of truck buyers reveals astonishing price news. Questioned from coast to coast, hundreds guessed wrong on the price position of America's low-priced trucks. Many answered that they believed Dodge trucks "cost up to \$135 more than the others." Yet Dodge is now priced with the lowest!

Best Proof of Extra Value!

Maybe we have told America too convincingly about the sensational extra-value features built into the new 1938 Dodge trucks. Perhaps people simply can't believe that Dodge can give so

much extra for your money. Yet it's the truth.

Possibly you, too, have thought of Dodge as "worth more"... "higher priced." Today, in most cases, there is only a few dollars difference in the prices of the low-priced trucks. And Dodge is priced with the lowest!

Remember, Dodge makes a truck to fit your needs in its complete line ranging from 1/4-ton commercial cars to heavy duty trucks. So, before you buy any truck, ask your Dodge dealer to send a 1938 Dodge truck for you to try. Phone him today.

So Much Extra Value in Dodge Trucks... That Buyers from Coast to Coast Overestimate Price



Hundreds of truck buyers from New York to California were asked in personal interviews to estimate truck prices in the low-priced field. A surprising percentage over-estimated the Dodge truck prices.



Many Buyers over-estimated Dodge truck prices \$100 and more. When told Dodge prices, some immediately checked on the phone with local Dodge dealers. The answer they got was, "Dodge is priced with the lowest!"



NEW 1938 DODGE 1/2-TON PICKUP—6-Cyl. "L" Head Engine—120" W.B.—All truck... and built to haul bulky loads at a saving. Packed full of quality features that cut operating costs. See your Dodge dealer.

PRICED WITH THE LOWEST!

DODGE CHASSIS PRICES DELIVERED IN DETROIT
Including Federal Taxes. (Local, State Taxes Not Included)

1/2-TON
116" W.B.
CHASSIS

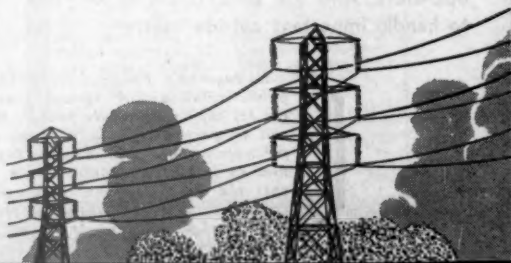
1 1/2-TON
133" W.B.
CHASSIS

Price includes front bumper.

Other models, including 1/4, 1 1/2, and 3-ton, at correspondingly low prices. **FOR DELIVERED PRICES IN YOUR LOCALITY SEE YOUR DODGE DEALER**... Budget terms to fit your needs.



To supplement your organization
 ...to save you the cost of breaking
 in additional linemen ... to enable
 you to avoid discharging new men
 when a project nears completion.
Hoosier Crews Are Ready



HOOSIER ENGINEERING COMPANY

CHICAGO

46 SO. 5TH ST., COLUMBUS, OHIO

NEW YORK

Canadian Hoosier Engineering Company, Ltd.
Montreal

ERECTORS OF TRANSMISSION LINES

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YOUR WHOLE ORGANIZATION ON YOUR DESK



Dictograph's intercommunicating System puts the whole organization on your desk. With the flip of a key you have immediate access to all information without dialing or waiting for the operator. You may converse with any other member of the company or several at once in a low tone of voice, with both hands free to take notes, without even leaning over to speak or hear.

With Dictograph, no inter-office calls go through the switchboard, no one must wait while the line is busy, there are no annoying "call me backs," no "listening in" by the operators. And the switchboard is left free to handle important outside calls.

In short, Dictograph enables you to obtain instant, up-to-the-minute reports, to issue instructions to several people in different parts of the building at once, to make instant decisions. It eliminates office visiting, keeps every man at his desk.

Best of all, perhaps, Dictograph smoothes your day, oils the routine of business, leaves more time for planning and thinking. These systems can be adapted to fit any particular intercommunication need. Learn what they have done for other companies, what they can do for yours. Write today and ask for further information.

Dictograph's Public Utility System is the key to improved public relations. A special Customer Contact Clerk, chosen for his ability to handle people, takes care of all customers who call in person to inquire about service, make complaints, ask for adjustments, etc. The Dictograph on the clerk's desk puts him in immediate contact with any wanted reference source, cuts the time spent on individual transactions and leaves the customer with a favorable impression. Let us explain in detail the many advantages of this system.

DICTOGRAPH PRODUCTS CO., INC.

580 Fifth Avenue

NEW YORK, N. Y.

Offices in All Principal Cities Throughout the World

MANUFACTURERS OF PRECISION EQUIPMENT SINCE 1902

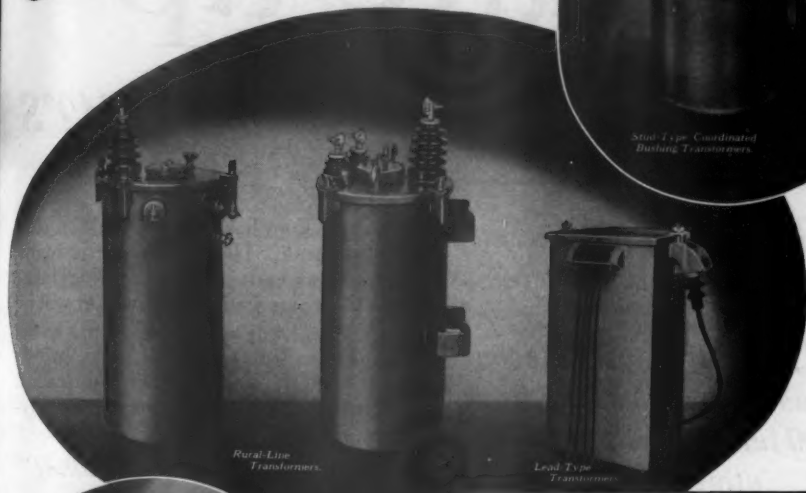
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DESK

Wagner Distribution Transformers *Command Attention*



Stud Type Coordinated
Rustling Transformers



Rural-Line
Transformers

Lead Type
Transformers



Large
Distribution and
Substation
Transformers

● Transformers with outstanding service records of low maintenance and continuous performance under all types of weather conditions command the attention of public utility men everywhere. Wagner distribution transformers have built a reputation for years of satisfactory operation because they meet the necessary requirements essential for proper distribution of electric power. They contain such factors as: (1) carefully designed, pre-tested materials, (2) low electrical losses, (3) good regulation, (4) adequate safety features, and (5) details that make for ease of installation and maintenance.

To enable you to select transformers that will meet your needs—Wagner distribution transformers are available in all standard types and ratings, in sizes up to 500 kva. Write today for your free copy of Wagner Bulletin No. 180.

TD238-38A

Wagner Electric Corporation
6400 Plymouth Avenue, Saint Louis, U.S.A.

MOTORS TRANSFORMERS FANS BRAKES

How to Save Make-up and Boost Turbine Hours

Over half the power generated for industry in America comes from turbines using Gargoyle D.T.E. Oil Light. Socony-Vacuum's experience with over 9,000 turbines helps find operating economies

FOR LENGTH OF SERVICE and turbine hours per gallon of "make-up," no turbine oils measure up to Gargoyle D.T.E. Oil Light. That is why more than half the country's turbines rated 5000 kw. and over use them exclusively. This wealth of turbine operating experience Socony-Vacuum places at the disposal of your men.

Socony-Vacuum has "kept cases" on turbine operation. This experience is made available without cost to turbine men. Pamphlets prepared on this subject will be sent at your request. In addition, see the new movie called "The Inside Story," which reveals exactly what Correct Lubrication does. Just write to the nearest Socony-Vacuum office for these aids.

"72 Years of Experience Calling"

That is what the chief of a great utility wrote to one of his station superintendents. For when the Socony-Vacuum Representative calls on you, he brings to your problems the greatest experience in the oil business. Many operators find this experience helps them to chalk up records for efficiency and economy. Why not make sure to see if our man has something you can turn to your advantage?

SOCONY-VACUUM

OIL COMPANY, INCORPORATED

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No one better exemplifies the American businessman than Benjamin Franklin, shown in the picture above conferring with his associates during the early days of our nation.

From the M. G. M. Short Subject, "Servant of the People"

COOPERATION to Combat Recession," news headlines proclaim.

"Let's Have Teamwork," editorials plead.

"All together now," speeches exhort.

Splendid! More of that means less of the discord, misunderstanding, and frequent bogging down of business so rife and regrettable during these frantic '30s.

We, the 1,000,000 members of 2,000 Chambers of Commerce, give voice to a fervent "Amen."

And our fervency is born of experience. We know what teamwork can do. It is the power-stream, the motive force of every Chamber. Since the Chamber of Commerce of the State of New York, older than the U. S. Government itself, fought the Stamp Act and the tax on tea in 1768, American businessmen have been working together.

Working together, Chamber members work out business problems, straighten tangles, adjust injustices every day everywhere.

Working together, they are "still in there pitching" for a better understanding of business.

Working together, they have helped to make their communities better places in which to live . . . by helping to provide schools, colleges, hospitals, clinics, parks, play-grounds. By providing jobs, aiding industries, ironing out labor problems and trade wars.

Teamwork is an old story that never seems to grow old in its ability to tackle trouble—and down it!

Such cooperation is for the real things, the good things our business civilization stands for. The things people mean when they say "What helps business helps you."

This advertisement is published by

NATION'S BUSINESS

—a magazine devoted to interpreting business to itself, and bringing about a better understanding of the intricate relations of government and business. The facts published here are indicative of its spirit and contents. Write for sample copy to NATION'S BUSINESS, WASHINGTON, D. C.

If you are interested in a special pamphlet on the subject of teamwork in business through Chambers of Commerce, write: NATION'S BUSINESS, U. S. Chamber Bldg., Washington, D. C. No obligation.

1938 LIGHTING



Light Companies have prompted Merchants with modern merchandising methods. Conditions as shown to left have been deleterious to merchant's progress and sales.

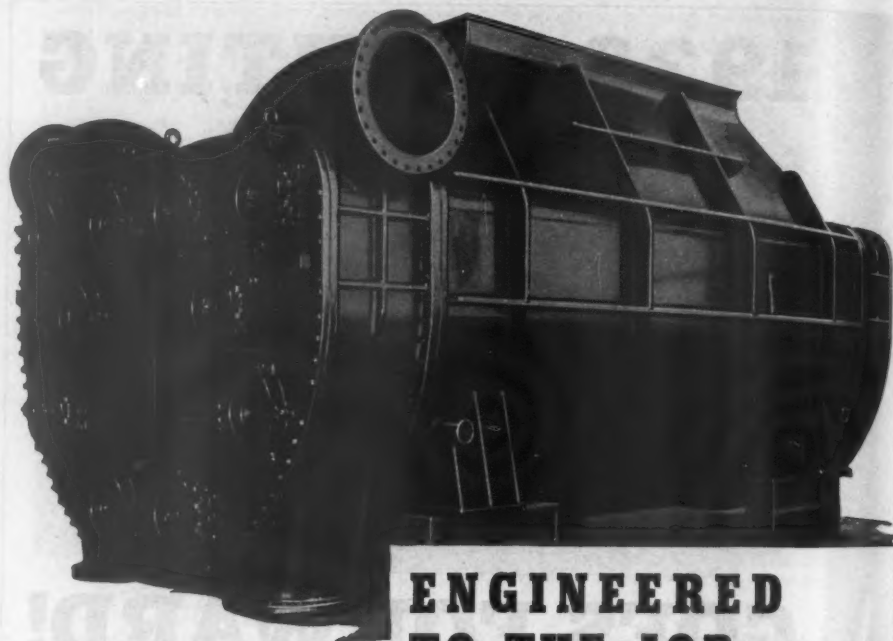
GOES FORWARD!



Results of Light Companies activities are startling! Newsales possibilities have been opened to Mr. Merchant. And, now 1938 promises still greater strides in LIGHTING!

EDWIN F. **Guth** COMPANY

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are fitted to the installation by engineers specialized in proper condenser application.



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is this Elliott 18,200 sq. ft. surface condenser, built to serve a new 20,000 kw., turbine in the Mad River Station of the Ohio Edison Company at Springfield, Ohio. The shell is of welded steel plate construction with cast iron water boxes. Good solid engineering design plus high grade workmanship, guarantee most successful operation.

ELLIOTT COMPANY

Heat Transfer Department
JEANNETTE, PA.

District Offices in Principal Cities

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Utilities Almanack

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12	Th	<p>† A. G. A. Natural Gas Department concludes convention, New Orleans, La., 1938.</p> <p>† Indiana Telephone Association ends session, Indianapolis, Ind., 1938.</p>
13	F	<p>† National Petroleum Association starts meeting, Cleveland, Ohio, 1938.</p> <p>† National Fire Protection Association ends session, Atlantic City, N. J., 1938.</p>
14	Sa	<p>† International Petroleum Exposition begins, Tulsa, Okla., 1938.</p> 
15	S	<p>† National Electrical Manufacturers Association opens spring conference, Hot Springs, Va., 1938.</p>
16	M	<p>† Indiana Gas Association starts annual meeting, Gary, Ind., 1938.</p>
17	Tu	<p>† Wisconsin State Telephone Asso. and Wisconsin Locally Owned Telephone Group open convention, Madison, Wis., 1938.</p>
18	W	<p>† American Institute of Electrical Engineers begins northeastern district meeting, Lenox, Mass., 1938.</p>
19	Th	<p>† American Water Works Association, Pacific Northwest Section, opens meeting, Spokane, Wash., 1938.</p>
20	F	<p>† Pacific Coast Electrical Association will hold annual convention, San Francisco, Calif., May 26, 27, 1938.</p>
21	Sa	<p>† Edison Electric Institute will convene for annual session, Atlantic City, N. J., June 6-9, 1938.</p>
22	S	<p>† National Electrical Wholesalers Association opens annual convention, Hot Springs, Va., 1938.</p> 
23	M	<p>† American Water Works Association, Florida Section, starts convention, Daytona Beach, Fla., 1938.</p>
24	Tu	<p>† Midwest Industrial Gas Sales Council convenes, Indianapolis, Ind., 1938.</p> <p>† A. G. A. Production and Chemical Conference opens, New York, N. Y., 1938.</p>
25	W	<p>† Association of Gas Appliance and Equipment Manufacturers convenes for session, White Sulphur Springs, W. Va., 1938.</p>

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From an etching by James E. Allen

Courtesy, Kennedy & Co., New York

The Pipelayers

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Public Utilities

FORTNIGHTLY

VOL. XXI; No. 10



MAY 12, 1938

The "People's" Propaganda

The variety and enormous extent of the New Deal government's paternalistic publicity activities exceed, declares the author, anything heretofore known.

By MILLARD MILBURN RICE

THERE is a saying, you may recall, to the general effect that the kettle is scarcely justified in calling the pot black. If the kettle were not itself black, it might have some excuse for criticizing the blackness of the pot. But since it is black—or was in the days when the saying originated—it had better remedy its own blackness before criticizing the pot.

In this case the "pot" is the public utility industry and the "kettle" is the Federal government. The kettle undertook specifically to call attention to the blackness of the pot through the investigation and report of the Federal Trade Commission on the public relations activities of the utilities. In ad-

dition to this particular investigation and report, the Federal government, through many publicity channels, has attacked the public relations methods of the utilities.

So, what of the kettle itself? How black is it?

Well, the kettle is at some pains to conceal its blackness. This is not surprising, perhaps, for it is obliged to circumvent its own laws every time it hires a publicity expert. Away back in the Wilson administration, Congress passed an act which declared that "no money appropriated by this or any other act shall be used for the compensation of any publicity expert unless specifically appropriated for that pur-

PUBLIC UTILITIES FORTNIGHTLY

pose" (Act of October 22, 1913 [38 Stat. L. 212]). And there never has been any money specifically appropriated by Congress for that purpose since that act was passed. There are, however, two indirect appropriations which might be construed as exceptions to that statement. In the appropriation for the Social Security Board for the fiscal year 1937, expenditures are authorized "for public instruction and information deemed necessary by the Board." And §7 of the Agricultural Adjustment Act, as amended June 16, 1933 (48 Stat. L. 210), contains this provision:

Notwithstanding any provisions of existing law, the Secretary of Agriculture may, in the administration of the Agricultural Adjustment Act, make public such information as he deems necessary in order to effectuate the purposes of such act.

NEITHER of these provisions can be considered specific appropriations for compensation of publicity experts, and hence every publicity expert now receiving government funds for services rendered is a direct negation of the will and law of Congress. Small wonder, therefore, that there is considerable reluctance to disclose the number of publicity experts now in the employ of the multitudinous governmental agencies. Just the same, there are some facts available both as to quantity and quality. So let us examine both the depth and the extent of the kettle's blackness.

First as to quantity. The quantity under the present administration exceeds anything heretofore known. And since the most severe criticism of the activities of the utility industry has come from this administration, we shall confine ourselves chiefly to the

present scope of governmental publicity activities. Know then, at the outset, that there are eighty-two separate "Offices of Information and Publications" admitted by the Federal government. Or at least, there were eighty-two when the admission was made. There may be more now, and there may have been more then, for there was no legal compulsion to admit all of the agencies.

THESE eighty-two offices of information and publications franked through the mails in 1936 nearly seven hundred million pieces of mail—or approximately two million pieces every working day. This was nearly fifty million more pieces than were franked the preceding year, and twice as many as were sent out in any year preceding 1933. In 1936, transportation for this deluge of free mail cost the Post Office Department, and hence the taxpayers, approximately one-tenth as much as it cost to complete the Panama canal. What it cost to produce it nobody comes forth to declare.

Some time ago the Brookings Institution, an impartial economic fact-finding agency of the highest repute, made a study of the publicity activities of the government. Using investigators' experiences in ferreting out facts in Washington, and smoothing their way with many official contacts, nevertheless the Brookings study found it impossible to give complete information on the Federal publicity machine. Examining their findings, however, we discover that, in Washington alone, thirty-nine of the eighty-two "Offices of Information and Publications" admitted to the employment of 250 whole- or part-time press

THE "PEOPLE'S" PROPAGANDA

agents who, as of October 1, 1936, were drawing annual salaries at the rate of \$900,123. At that rate, the entire eighty-two offices would employ 525 press agents, either whole- or part-time, at salaries of approximately \$1,900,000 per year.¹ But this is understood to apply to the city of Washington alone, and omits one or more of the known huge units of Federal publicity, notably the WPA. WPA publicity costs are, according to one slightly ironic commentator, "known only to Harry Hopkins and God." Probably no living person knows the totals of publicity employees, publicity payrolls, and publicity emissions which apply to the nation as a whole.

IN addition to the enormous outpouring of printed matter which burdens the mails each day, there are other effective forms which are utilized in varying degree for government publicity; namely, moving pictures, phonograph records for radio transmission, and radio addresses. The investigator is literally bewildered when he attempts to present even a partial catalogue of this mass of material which is so effective because it uses the two most popular forms of entertainment. Nearly every major department, bureau, division, board, commission,

¹Tabulated from Appendix, pages 543-552, inclusive, in Senate Report No. 1275, 75th Congress.

administration, corporation, and authority of or under the Federal government is engaged in issuing some publicity material through these two media.

The report of the study made by the Brookings Institution for the Senate Special Committee to Investigate the Executive Agencies of the Government states concerning the use of moving pictures by Federal agencies:

On October 27, 1936, The National Archives had a record of over 15 million feet of motion picture films deposited in 76 government agencies . . . On July 31, 1936, the United States Information Service issued a list giving the titles of 533 films available through government departments.²

² Of the 533 films listed by the Information Service, 307 were in the Department of Agriculture which had organized a separate service of this type as early as 1922, with total production cost (through fiscal year ending June 30, 1936) of \$100,539.58. For the Interior Department there are listed 55 films for the Bureau of Mines, 13 for the Reclamation Bureau, 16 for National Parks and Monuments, and 20 for other scenic and recreational features. For the Civilian's Conservation Corps the Interior Department made pictures costing \$68,474.13, and the Department of Agriculture produced more movies costing \$22,127.88. The Resettlement Administration made the famous three-reeler, "The Plow That Broke the Plains," for \$40,113.40 which was distributed free to motion picture houses just as the more recently produced film, "The River" (Farm Security Administration), was distributed. Net cost of the WPA Federal Theater Project "Power" has not yet been made available. The Social Security Board's "We, the People and Social Security" cost a total of \$24,499.67. The Federal Housing Administration also made seven one-reelers costing \$83,762.77. For further details of personnel required, number of copies made, length of film, etc., see the Brookings Institution report above mentioned.



Q"THERE is no human relationship so potent as personal contact. And every non civil-service Federal employee in the land is a committee of one representing his employer in personal contact with the rank and file. There are thousands of personal representatives of Federal agencies spread throughout the country. They reach down into every county, almost every hamlet, in the land."

PUBLIC UTILITIES FORTNIGHTLY

The Federal Housing Administration uses radio extensively as well as movies. During the fiscal year ended June 30, 1936, \$40,470.32 was spent on radio activities. All time was donated, so that expenses were for salaries, travel, electrical transcriptions, and so forth. Seven electrical transcriptions were prepared, and from these 1,405 records were made. Its recorded radio programs are used by more than five hundred radio stations each week.

IN the fall of 1936 the old RA was supplying electrically transcribed programs to more than four hundred radio stations, and in the fiscal year ended June 30, 1936, twenty electrical transcriptions were prepared by the RA, from each of which 100 records were made. Through the National Farm and Home Hour of the National Broadcasting Company, the Department of Agriculture reaches what is said to be the largest farm radio audience in America. Representatives of the Department make daily use of this opportunity for presenting facts and expounding theories, and the Secretary himself is personally heard on this program on an average of approximately once a week. The Social Security Board furnishes more than four hundred radio stations with electrically transcribed records. Dr. Stanley High, a New Deal seraph who has lately fallen from grace, is authority for the statement that between July, 1936, and July, 1937, programs favoring the Social Security Act were on the air 3,952 times. The WPA advertises itself through its electrical recordings for radio, and three hundred local radio stations now use these.

Even the blind have not been slighted. The WPA has made, and distributed free to the blind, many electric talking-books. With each talking-book there goes a special record, part of which contains instructions for operating the machine, and part of which is a speech by Harry Hopkins.

BUT imposing as this record of publicity is, it is only one type of public relations activity of the Federal government. There is no human relationship so potent as personal contact. And every noncivil-service Federal employee in the land is a committee of one representing his employer in personal contact with the rank and file.

There are thousands of personal representatives of Federal agencies spread throughout the country. They reach down into every county, almost every hamlet, in the land. Consider, by way of illustration, the Home Owners' Loan Corporation. It has offices in forty-eight states, in the District of Columbia, in Hawaii, in Puerto Rico. In many states it has regional, division, and district offices. In a large state such as Pennsylvania, its offices are as follows: state office in Philadelphia; district offices in Harrisburg, Scranton, Pittsburgh, Erie, Johnstown. There is also a branch of the state office in Pittsburgh. But this does not tell the whole story. There is a representative of the HOLC in nearly every county in the United States—a personal contact man dealing first-hand with the beneficiaries of the HOLC.

But far larger and more potent than the HOLC are the numerous contacts made through the various agencies of the Department of Agriculture which administer not only the consid-



WPA Publicity

"THE WPA publicity has overlooked few opportunities for evangelism for the party in power. Its musical recordings by WPA musicians are played on hundreds of local stations daily. There is a one-minute talk on each record, and this talk is WPA salesmanship. It is presented in a subdued and dignified manner, and that adds, of course, to its effectiveness in an atmosphere of well-presented musical entertainment."

erable routine work of the Department, but also the vast program of "emergency" benefits. In addition to the thousands of special agents of every description, every county farm agent, and every home demonstration agent, is an apostle of the Department and takes orders from it. Compliance committees for the various farm regulatory acts, generally composed of local loyal partisans of the present administration, have contacted farmers to check compliance and to point out the great benefits to be derived therefrom. This publicity approach is second to none—that of neighbor to neighbor.

Every WPA foreman is an evangelist of the Federal administration, singing its praises.

ALL of the foregoing by no means tells the complete story of the extent—the quantity—of public relations activities of the Federal government. But it does give some idea of

the completeness with which the country is blanketed by publicity. It shows how utterly impossible it is for any citizen, literate or illiterate, to escape this ceaseless outpouring. And it raises the very interesting question as to the type—the quality—of this ocean of publicity and this blanket of public relations.

When we begin to discuss the quality of Federal publicity we run squarely up against theory of government itself. How far, the question arises, may the publicity of a democratic government go? Strictly speaking, it might be argued that a democracy has no right to do more than answer the direct inquiries of its people. In a pure democracy, governmental policies should be merely an expression of the desires of the majority of the people. It is the measured opinion of many serious students of government that, however pure democracy may or may not be in America, it is not the prov-

PUBLIC UTILITIES FORTNIGHTLY

ince of a national administration to attempt either to create or to shape public opinion; that it should confine its publicity activities to purely factual statements of its achievements, and to direct answers to the inquiries of its citizens. Since it should be the servant of the people, it should not use its publicity to do more than establish a standard of procedure and to render an account of its stewardship. To do more may undermine the democratic principle and tend toward the establishment of a dictatorship of thought if not of conduct.

IF we approach the publicity machine of the Federal government from this angle, we find some startling things. We find that while there is much that is properly informational and purely educational, a great deal of its output is policy-making and evangelical. Some of it is so subtly worded as to seem purely factual, but is evangelistic nevertheless. Some of it is coercive in effect if not in intent. While no one will deny to the Federal government the right—and the duty—to inform its citizens, the very magnitude of the informational machinery of the present government—a glimpse of which we have been getting in the preceding paragraphs—is almost *prima facie* evidence that some of it is used for purposes which are more than informational and educational.

Start anywhere, with any agency of the present administration. Take the FHA, because it happens to come first to mind at the moment. Already the FHA has supplied the funds to make it possible for a million and a half home owners to modernize and repair their homes. Entirely aside from the

effect the receipt of this money through government channels has had upon the independence of political thought of these home owners, the representatives of FHA who have dealt with them have certainly not overlooked the political opportunity these contacts afford. It has not been crude or pointed, of course. But the immediate source of these funds has been made abundantly clear to their recipients. That is a very effective type of public relations, and if the FHA representatives have not grasped their golden opportunities, then they are not normal human beings.

BUT the FHA has been active on other fronts. It has been sending weekly clip-sheets to approximately 2,000 dailies, 5,000 weeklies, and 700 foreign-language publications of various kinds. The contents of these clip-sheets are excellent material for the real estate editors of newspapers, and much of this material is used. Always there is some tie-up with the FHA. Use of much of this material by some 2,500 publications in special real estate editions has increased revenues from real estate advertising, and has not, therefore, created ill feeling toward the FHA on the part of the press. It is an excellent way of getting a good press.

The press releases of the FHA, while built scrupulously upon factual material, are illustrations of what good press agents can do with such material. There is generally, somewhere in this factual recital, and usually near the beginning of the article, something which effectively reminds the reader that the FHA is about to liberate the home owner from all the difficulties which have heretofore beset him. They

THE "PEOPLE'S" PROPAGANDA

may speak of fostering new concepts of property ownership and management, and new concepts of design and construction, and new ideals in every phase of the housing field. Without using the words, they are actually saying that here is a new deal for the home owner. It isn't difficult for the lower case letters of new deal to become capital letters in the minds of those who are affected by the FHA activities, or who read its publicity.

WHILE the FHA has been dealing with a million and a half people, the Social Security Board has been dealing with twenty-six millions. And many of its dealings have been on the same plane. For several months in the fall of 1936, the press agents of the Social Security Board were singing the praises of the Social Security Act. They worked through newspapers, through moving pictures, through the radio, through foreign language newspapers. But perhaps their most effective medium was posters. They enlisted the aid of WPA artists, and nearly three and a half million posters were distributed. Presumably these posters were purely explanatory. Without denying that they served that purpose, there was a considerable admixture of subtle political advertising.

Political evangelism was palpably demonstrated in the poster whose heading was "A Monthly Check to You for the Rest of Your Life." A hand holds forth a government check, while the background is a picture of the U. S. Capitol. Whatever the small print on this poster may say, the large letters are very definitely a promise of some sort of perpetual care at the expense of the Federal government. It undoubtedly meant just that to millions of simple souls who read it in their post offices and wherever else it was displayed. The idea that somebody was going to have to pay for this was pushed into the background.

SIMILARLY with the Resettlement Administration, lately absorbed by the Farm Security Administration. (Incidentally, the absorption of much criticized agencies, such as RA, into new and unknown agencies is another effective device, which is apparently a part of Federal public relations policy, for nullifying popular criticism when it becomes too pointed. Thus when the RA program was in danger of becoming a label for errors and blunders, the name was changed.) RA press agents were adept at painting the joys of life in certain of the projects built by RA, but they were silent about



"IN addition to the enormous outpouring of printed matter which burdens the mails each day, there are other effective forms which are utilized in varying degree for government publicity; namely, moving pictures, phonograph records for radio transmission, and radio addresses. The investigator is literally bewildered when he attempts to present even a partial catalogue of this mass of material which is so effective because it uses the two most popular forms of entertainment."

PUBLIC UTILITIES FORTNIGHTLY

the indefensibly high costs involved. Readers of RA publicity were given the impression that these projects would be self-liquidating. It, too, carried on a broad campaign, particularly in the fall of 1936, by means of electrical transcriptions for radio stations.

The WPA publicity has overlooked few opportunities for evangelism for the party in power. Its musical recordings by WPA musicians are played on hundreds of local stations daily. There is a one-minute talk on each record, and 'this talk is WPA salesmanship. It is presented in a subdued and dignified manner, and that adds, of course, to its effectiveness in an atmosphere of well-presented musical entertainment. It is in the moving picture, "We Work Again," that the WPA perhaps reached a high point of evangelism for itself and for the national administration. This film is directed to Negroes, acted by Negroes, and it drives home to every Negro who sees it the paternalism of his government. Dr. Stanley High is quoted as saying that until he saw this film he had thought that his Good Neighbour League had been largely responsible for swinging the Negro vote to the present administration, but that after seeing it he realized that here was an agency far more potent than his own as a Negro vote-getter.

NOTHING talks like money, and the PWA publicity program might well have taken that general truth as its slogan. Much of the PWA publicity is accomplished through so-called allotment releases, some five thousand of which have been issued to date. The allotment release, consisting frequently of more than two hun-

dred pages, lists recently approved PWA grants to various communities. But it lists them in such a clever way that news almost prints itself. And this is how it is done:

The releases are made available to Washington correspondents in Washington, and to state and local correspondents at the offices of the PWA state directors. Releases are minutely indexed. The correspondents need only to run through the index, pick out those localities which are in the territory served by their papers, turn to the indicated page, and, presto, there is the story already written. It will not contain one word which, by any stretch of an antagonistic imagination, could be called anything but factual. And yet it is effective propaganda because these grants of PWA money are sure-fire news in the communities affected. They fairly shout to all who read them that the Great White Father in Washington has his benign countenance turned in their direction. Does anybody hate Santa Claus—except, perhaps, father who pays the bills after Christmas?

IT should be obvious by this time that there is almost no limit to the recital. We might continue it indefinitely, and here we have necessarily been touching only the highest of the high spots. There is one more high-spot—somewhat in reverse English, perhaps—which should not be overlooked. That is the Federal Communications Commission. This powerful commission, which has the literal power of life and death over every wire and radio in the country, must necessarily exert powerful influences in two directions—whether it does so

THE "PEOPLE'S" PROPAGANDA

consciously or otherwise. In one direction, fear of its displeasure is likely to create a definite influence toward more liberal allowance of time for Federal programs on the radio networks. In the other direction, this influence has a tendency to set up an indirect censorship of material too displeasing to the present administration which requests time on the ether waves.

A former member of the then Federal Radio Commission is quoted as declaring in August, 1933, that "it is the patriotic, if not the bounden and legal, duty of all licensees of radio broadcasting stations, to deny their facilities to advertisers who are disposed to defy, ignore, or modify the codes established by the NRA." While this was, perhaps, an extreme statement, the reaction to it by the owner of a radio station which holds a license by the grace of the radio commissioners can well be imagined.

THE evangelistic portion of Federal publicity is sometimes defended on the grounds that it is a holy crusade for the right of the "people's" propaganda. There is a strong tendency here to justify the means because of a passionate faith in the end it is designed to obtain. This, at last, is "the right right," to borrow Bernard DeVoto's phrase.

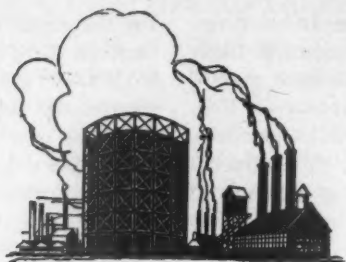
But memories are short. Twenty years ago we also had the right right, and the idealistic government of Woodrow Wilson set up a public relations machine—second only to that of the present moment—to proclaim that right. Then it was to make the world safe for democracy. The idealism of that period is now assailed. We are now told by some of today's crusaders

for the right right that we had not idealism then, but only self-deception. In 1917-18 when news was edited or suppressed, idealism justified that means as necessary to the attainment of safety for democracy. While we do not have news suppressed, today's positive evangelism is justified as necessary for the attainment of "social security." It will be interesting to examine the outpourings of today in the light of twenty years of experience in 1957-58. What then will be the right right?

But can anything be done now without waiting for the inevitable corrections which time makes? The answer isn't easy. Obviously—to select the mildest example mentioned above—the PWA has not only the right but the duty to release information about the various loans and grants made from public funds. The people have a right to know what these projects are and where they are located. Is it or is it not incidental that the release of such information can have more than a purely informational effect?

IF the releases of all agencies adhered rigidly to the form of the "typical" government report, there might be less evidence that their object is evangelical. If they were not injected into the consciousness of the people by every known attention-getting means, the evangelical note would necessarily be softened.

Statutory provisions, as we have seen, have very little effect. They can be circumvented. The remedy lies deeper. It lies in a realization on the part of the people that Federal paternalism is the most costly and most dangerous thing a free people can seek.



Increasing Competition for the Gas and Electric Market

In view of the fact that technical changes in the production or distribution of gas and electricity and the new uses to which they have been put have been bringing them into sharper conflict, the author discusses the question whether or not there should be a divorcement of common corporate control of the sales of gas and electricity to the same groups of consumers.

By C. EMERY TROXEL

UTILITY men may be too punch-drunk from their many battles to worry about the proposed slicing of control of gas and electric companies. Though it did not unbiasedly weigh the reasons for or probable results of the decision, the Federal Trade Commission in 1935 recommended divorcement of corporate control of gas and electricity sales made to the same groups of consumers. With one commentator concluding that "this would be an outrageous thing to do," it is probably true that all gas companies, regardless of their relation with electric companies, oppose such governmental carving.

A few months before this declaration by the Federal Trade Commission,

NOTE.—Though the writer assumes full responsibility for anything said here, Chester J. Gerkin, Esq., of New York, offered valuable comments when the article was being prepared.

the Public Utility Act of 1935 (the Holding Company bill) had been passed, and in it are some sections which directly or by implication bear upon this matter. Here is a problem which touches appliance manufacturers, regulatory policy which heretofore was invoked partly at least to prevent cut-throat competition, and the trends of market expansion for gas and electric utilities.

The desirability of competition to control public utility prices is an old controversy on which academic men, commissioners, politicians have argued and written. Several years ago, for example, Professor Cabot was roundly criticized for proposing that competition of utility companies and services was preferable to regulation. While this issue neither provokes as much attention nor the abundance of comments that have been had on TVA, Quoddy,

INCREASING COMPETITION FOR THE GAS & ELECTRIC MARKET

Grand Coulee, or dismemberment of holding company systems, it is, nevertheless, an issue deserving of more than a glance or a nod.

In the last decade technical changes in production or distribution of gas and electricity and new uses to which they have been put have been bringing these gas and electric companies into sharper competitive conflicts. Indeed, where these services are not marketed by the same company, gas companies especially are sharpening their weapons to battle more effectively with electric companies. Electric companies and their appliance manufacturers — and the drive of these manufacturers for more sales is behind much of this competition—are commonly charged by their gas rivals with propagandizing and false advertising. Competition between these utilities will continue to increase where lighting sales of electricity and cooking sales of gas become less and less important respective sources of revenue.

GAS and electricity are frequently sold by the same company. In 1932 it was estimated that 27.2 per cent of the electric establishments with average capitalization of \$9,260,253 were composite companies. These plants reported that 63.8 per cent of their revenue was from electric sales. Between 1922 and 1932 "purely electric" companies had a 38.3 per cent increase in revenue, whereas composite companies had an increase of 150.4 per cent in all revenue and an increase of 438.8 per cent in revenue other than from electricity.¹ These figures reveal

that, as an average, composite systems are the larger utility companies and that common corporate control of these services has been increasing. In addition, because of the tremendous pre-1929 growth of holding companies, many separately incorporated and managed gas and electric companies, which serve in the same area, are controlled by the same holding company. In either of these cases there is doubtless some curbing of competition between the otherwise competitive services.

Before the problem of divorcement of gas and electric business is examined, there first ought to be a sketch of some of the features of competition between these industries. In 1887 the American Gas Light Association said that "as sure as the sun shines today, the electric light has come to stay, and to exist as an active competitor of gas." Worse for the gas industry, gas lighting is all but nonexistent today. Driven to find markets to replace their dwindling lighting business, gas companies developed various heating uses for their product. A dominance of heating business for both natural and manufactured gas companies has brought these utilities into varying degrees of competition with sellers of fuel oil and coal. And after fostering sales of gas for cooking and other domestic uses, gas companies have suffered from frequent improvements of the electric stove and other appliances which have permitted notable inroads into this basic source of gas company revenue. Here is another instance where technological changes have altered what has been tradition, with a consequent loss to investors; there is always the possibility of a similar risk in the future.

¹U. S. Department of Commerce, *Census of Electric Industries, Central Electric Light and Power Stations*, 1932, p. 12, 14.

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COMPETITION between electric and gas utilities is now most noticeable for these uses: domestic cooking, refrigeration, water heating, and industrial heating where careful heat control is needed. Perhaps the figures outlined below on sales of appliances for competitive uses of gas and electricity will reveal the trend.

It is estimated that about 15,000,000 gas ranges are in use (many are outmoded) compared to 1,000,000 to 1,400,000 electric ranges. But since 1933 the sales of electric stoves have increased far more rapidly than sales of gas ranges. And usually about ten times more electric than gas refrigerators have been sold each year. In 1935 there were about 1,250,000 gas and 6,200,000 electric refrigerators in use.² Today the gas industry is losing ground in the cooking business, and is far behind in refrigeration sales.

Though no one knows how wide will be the acceptance of summer air-conditioning, there probably will be a struggle between gas and electric companies for this source of revenue. It

is not a dreamer's guess that summer air-conditioning may become a major industry in this country. When it is cheap enough to induce widespread use in the homes of persons with incomes less than \$2,500 a year, there will be a great stampede by the gas and electric industries (backed, of course, by their respective appliance manufacturers) to gather this now untouched, rich harvest of kilowatt hours of electricity and cubic feet of gas.

It is sometimes suggested that gas and electricity (without governmental forcing of it) will eventually be employed in their most proficient respective uses. A fundamental factor in this competition is a comparison of consumer acceptability of gas and electricity. Not only the cost of these services, but also the cleanliness, cost of appliances, convenience, flexibility, safety, et cetera, will be considered by consumers. And, of course, the price of gas relative to electricity differs according to the B. T. U. content of gas—a difference between manufactured and natural gas. No conclusive decisions can be made about the most suitable

²*American Gas Journal*, Vol. 146, April 1, 1937, p. 13.



Year	Domestic Electric*	Ranges Gas**	Domestic Electric*	Refrigerators Gas	Water Heaters Electric*
1926	110,000		205,000		
1927	102,000		375,000		
1928	135,000		535,000		
1929	152,781		778,000	50,000	
1930	180,000	1,375,000	791,000	65,000	
1931	115,000	1,002,000	906,000	85,000	
1932	60,000	984,000	798,000	100,000	
1933	50,000	600,000	1,016,000	80,000	
1934	123,000	628,000	1,284,000	120,000	
1935	215,000	720,000	1,568,000	160,000	70,000
1936	318,000	711,000	2,079,000	200,000	104,000

*From statistical and sales planning issue, *Electrical Merchandising*, Jan., 1937.

**From Association of Gas Appliance and Equipment Manufacturers, *Comparative Data on Gas Ranges*, April, 1936.

Estimates made by Mr. Springborn of the Staff of the *Gas Age-Record* (now *Gas Age*).

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utility service; it varies as individuals weigh the numerous factors.

A few incomplete cost and service comparisons of gas and electricity may be recited. An average gas range costs about one-half as much as an electric range; and the cost of installation is also much higher in the latter case. With 550 B.T.U. gas selling at \$1.15 per thousand cubic feet and electricity selling at 3 cents per kilowatt hour, it is claimed by gas companies' researchers that an oven-cooked meal is one-half as costly and a burner cooked meal is one-third as expensive with gas as with electricity.³ An electric range, it is further claimed by gas men, has neither the speed in cooking nor the temperature regulation of a gas stove. Also, lower maintenance costs for gas stoves is claimed, and electric ranges are charged with declining efficiency as they age, and with less uniform heat distribution in the oven.⁴ For refrigeration under the above-assumed conditions little difference is found in costs, except that natural gas at \$1.15 per thousand cubic feet would be less expensive. Although it is said that "the art of [air] cooling by gas has not yet been developed to the degree necessary to permit the use of manufactured gas in competition with other fuels,"⁵ gas companies in summer months may offer inviting off-peak rates. No great

inroads have been made by electricity in the gas companies' most competitive field, industrial heating. Recent development, for example, of a gas-fired radiant tube-heating element has cut into the use of electricity in vitreous enameling furnaces.⁶ In one enameling plant 80 cents worth of gas is now doing the work which formerly took \$5.25 worth of electricity. It appears that gas is at its best for heating and electricity for mechanical energy.

DESPITE these avowed advantages of gas over electricity for several uses, gas companies are losing ground in the tug of war. During recent years commentators and operators in the gas industry have become aware of this situation. Some writers on the gas industry have been giving "pep-up" or "booster" articles and editorials with the hope that more "dash" will come into an industry which "is not a very exciting line of activity except when you are losing money."

The advertising of the electric appliance manufacturers and electric companies—admittedly electricity production is a more "romantic form of enterprise, influenced greatly by frequent and startling changes"—is either proposed as something to follow or condemned as deceitful and unethical. "The electric industry is spending millions of dollars in convincing the public that the 'electric way' is the 'modern way.'"⁷

It is frequently claimed that managers of composite companies, because

³Phillip Rector, "Gas or Electricity for Domestic Cooking," *Gas Age-Record*, Vol. 78, Sept. 19, 1936, pp. 307-11. See also: Robert E. Ginna, "Economic Future of the Gas Industry," *American Gas Association Monthly*, Dec., 1936, pp. 426-28.

⁴American Gas Assoc. Testing Laboratories, *Reprints of Articles Covering Use of Gas and Electricity for Domestic Cooking and Heating Purposes*, especially Chapter 4.

⁵Eugene D. Milener, "Outlook for Industrial Gas," *American Gas Journal*, Vol. 146, April, 1937, pp. 11-14.

⁶Henry Heyn, "Industrial Gas Applications and Developments," *Gas Age-Record*, Vol. 79, March 4, 1937, pp. 27-30.

⁷Herman Russell, "Gas and the 'More Abundant Life,'" *Gas Age-Record*, Vol. 77, May 9, 1936, pp. 501-3.



Competition and Sales Control

"No utility company is completely without competitors, but the desirable, prevailing regulatory practice has been an avoidance of whatever competition results in needless duplication of plants or cut-throat pricing. Deliberate attempts of a large number of operators of composite gas and electric companies to avoid competition between these services and the tendency toward sale of gas and electricity for more competitive uses, seem to be inadequate reasons for the proposal that there ought to be divorcement of the now common control of gas and electric sales in the same market."

they are usually trained in the electric business, are not sufficiently "gas-minded." For rejuvenation of the gas industry these are some of the punches which have been recommended: more advertising, more research, more attractive appliances, aggressiveness—industries like persons grow sedentary with senility—or sale of gas in terms of its kilowatt-hour equivalent, for "introduction of this in several towns has brought the competing electric companies to a dead stop."

WITH this sketch of acknowledged suppression of gas business by combination companies and the existing or possible competition between these industries, consideration will now be given to (1) the proposals to divorce common control of gas and electric business and (2) to an X-ray of this

severance. Without offering other evidence (at least I can find no other) except that "gas and electricity are increasingly competitive, and in many communities are the two chief sources of power and light, and because the 3 or 4 dominant interests in natural gas and gas pipe lines also are in the electric utility field," the Federal Trade Commission recommended in December, 1935, "that, with proper limitations as to time and place, divorcement of the two be made compulsory."⁸

Section 8 of the Public Utility Act of 1935 gives the SEC power to require that a registered holding company obey state laws which forbid or necessitate authorization of "ownership or operation by a single company of the utility assets of an electric

⁸Utility Corporations, 70th Cong., 1st Sess., Doc. 92, Part 84-A, p. 617.

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utility company and a gas utility company serving substantially the same territory. . . . " Not to the author's knowledge are there any state laws presently in operation which require this division of control. And §11b, which would permit simplification of a holding system into "a single integrated public utility system" plus other business "reasonably incidental or economically necessary," may be construed, of course, to allow dissection of control of a presently composite gas and electric business. Thus, the notion of a break-up of control of a gas and electric business may actually be realized where holding companies are the effective agents.

THE Trade Commission's recommendation should be more amply supported with evidence. Mention of common control of natural gas and electric companies is not notably significant, because electricity has not been an important challenger of natural gas in any sort of heating sales except in domestic cooking business 500 or more miles from the gas field. Natural gas companies encounter most of their competition from coal and fuel oil.

By supposition any of the following reasons might have prompted the Federal Trade Commission's proposal:

1. A prop for prevailing inadequacy of state commission regulation,
2. The not easily provable opinion that composite companies are pressing acceptance of the service most profitable to them,
3. That rates on some types of service could be made lower, since some composite utility companies doubtless have higher rates than if competition prevailed, or
4. Unrevealed political reasons.

Respecting several of the traditional reasons for invoking existing utility regulation, this severance of gas and electric business seems discordant, even though it has been occasionally claimed by superficial thinkers that competition of utility companies should be substituted for regulation. Prevention of cut-throat competition, with its consequent loss to all investors and eventual monopolization of sales, has been one commonly accepted reason for utility regulation. Now it is proposed that gas and electric companies be forced to compete! Doubtless the proposed competition would not be as vicious as if two gas companies were competing, but, nevertheless, it seems that cut-throat competition might result. It is not unlikely, furthermore, that service standards in noncompeting uses and credit standing of such companies would suffer, if in these instances of heavy fixed costs all bars on competition were dropped for a free-for-all struggle.

BECAUSE there has been no denial of it, this proposal is at least "presumptive evidence" that the prevalent commission form of rate and service control is unsuited to effect deserved rate reductions. Everyone who has dispassionately examined the well-known regulation procedures, knows that they are cumbersome and questionable. But the commission form of control has never been tried (perhaps never will be) under conditions favoring its success. Poorly trained and meagerly paid commissions, legal impediments of which the principal one is about fair value, and insufficient funds to permit frequent investigations, are all common deficiencies of commission regu-

lation. If, in fact, the gas department of a composite company is being monopolistically sublimated to the electric department (an unproven fact), it has not yet been shown that state commissions are less able to regulate a composite than a "pure" company's prices.

Measurement of a regulatory body's effectiveness, however, is being increasingly done in terms of rate reductions,⁹ often a faulty, biased procedure. This may well be the goal of these proposals. The untrained electorate would surely cheer simply for realized low prices, though there are no guards against ruinous results from this near-sighted notion. Even though a utility need not be guaranteed a fair return, reliance on rate reductions leaves out of account matters of encouragement of cost-reducing technological changes or service improvements. Also this competition might take the form of especially favorable promotional rates to induce purchases of appliances. Or what is even more likely, there might be price slashing on appliances to the extent of a loss on each appliance sold. Or, better for customers, a company might lend the appliance and give a few months' free service for a promise to use the appliance for a period of time. In any case there would be desire to

commit the customer to use of a service for the life of the appliance, or to habituate the guileless buyer to use of the service for his lifetime. Backers of the break-up might paint a colorful and consumer-pleasing scene: lower rates without building expensive dams, perhaps bargain days and leaders, lower priced or free appliances, and less expensive but still slothful regulation.

BEFORE this appraisal goes farther in the direction it is taking, several thoughts should be mentioned about competition or the absence of it between gas and electricity. First, a division of presently composite companies would make sharper the struggle between gas and electric appliance manufacturers (some companies produce both), although gas appliance manufacturers might gain from the separation. There is no assurance that consumers, who are regularly victims of the wiles of the advertiser, would become more alert if gas and electricity sales were not made by the same company. Next, technological advances probably have been more rapid in the electric industry since 1920, and this fact has encouraged composite company managers to take their new load-building chances with electricity and its greater promise of cost reductions. And, since electric service lines were already constructed to bring lighting to many customers, it would have been

⁹National Association of Railroad and Utilities Commissioners, *Report of Committee on Progress in Public Utility Regulation*, 1936, pp. 30-36.



Q "THOUGH no one knows how wide will be the acceptance of summer air-conditioning, there probably will be a struggle between gas and electric companies for this source of revenue. It is not a dreamer's guess that summer air-conditioning may become a major industry in this country."

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foolhardy for a company to build a gas line to sell gas for cooking and refrigeration unless the latter would be at least as profitable as the sale of electricity. In such cases composite companies are apparently pressing for consumer acceptance of their most profitable service, although electricity in this case may be the lowest priced service offered.

Competition is not equally sharp for all uses of gas and electricity. Lighting customers, for example, could not presently expect lower rates for the reason of competition between gas and electric companies. But customer gains would be notable in refrigeration, cooking, and water heating, and, probably in the future, in summer air-conditioning. Lighting customers of electric companies would presumably obtain lower rates by the familiar regulatory process. This would be, when carried to its logical end, a new rate-fixing procedure. Not cost, not demand characteristics of consumer classes, but cost and other characteristics of alternative services would fix the rate level for some customer groups. Because of their shortage of bargaining power, other less fortunate customers would be obliged to fight and wait for commission-ordered rate reductions. Admitting for sake of the argument that the costs for different uses may be approximately determined, it might, for example, cost more to serve electricity for cooking purposes than for refrigeration, but, if comparative gas rates demand it, lower electric rates would be given for refrigeration. Or, as observed before, to get customers to purchase an appliance, and thus commit them for a few years or a lifetime to that type of service, even lower rates than now exist might be given.

It may be arbitrarily concluded that these utility industries ought to be engaged in dog-fight competition. But this does not mean that separately owned and managed gas and electric companies serving the same area or locality can be forced to compete in this manner. It might take only a few forays into each other's hunting grounds before rules on competition or agreements to limit competitive practices would be reached. Two companies could easily reach an accord on price slashing and extravagant service offers. As soon as each competitor would be conscious that a rival will react to price cutting with more price cutting, the dangerous weapons, the use of which means a double financial suicide, would be thrown away. And to the dismay of those who advocate such competition, the supposedly competing companies might find it advantageous through control of competition to agree upon higher rather than lower prices.

Determination of the uses for which each service is best adapted and consequent restriction of any other utility company from making sales for the use in that locality might be a desirable procedure if this division of control is ever undertaken. But this regimentation is a bit fantastic, because (1) it would be difficult to determine the best adaptation of each service without first using competition of the services to test consumer opinion, (2) consumers would not approve the procedure, especially where considerable sums have been invested in appliances, or (3) technological changes in the future might warrant alteration in established restrictions. No, it seems much better that there be competition than that monopolies be granted.



Substitution of Competition for Regulation

"RESPECTING *several of the traditional reasons for invoking existing utility regulation, . . . severance of gas and electric business seems discordant, even though it has been occasionally claimed by superficial thinkers that competition of utility companies should be substituted for regulation. Prevention of cut-throat competition, with its consequent loss to all investors and eventual monopolization of sales, has been one commonly accepted reason for utility regulation."*

PERHAPS, as occasionally suggested by those who have considered the problem, a division of managerial control as differentiated from voting control will come whether or not there is legislation requiring severance. Separate companies may control the gas and electric businesses, even though these companies in turn are controlled by the same interests. In Chicago, for example, James Simpson, who was chairman of Commonwealth Edison and Peoples Gas Light and Coke, in February, 1936, resigned as chairman of the board of the latter company "in the belief that the management of the gas and electric utilities in Chicago should be separate and distinct because of their competitive nature." This separation of management without disturbance of existing corporate control does not fix conditions which would be analogous to the Trade Commission's proposal of separation of corporate control. There is little chance of a ruinously competi-

tive encounter when the two services are controlled by the same persons or corporation. To date the writer has not heard of more of the Chicago-type separations, *i.e.*, separate managerial control of gas and electric companies which serve the same market. Where a single corporation controls a locality's gas and electric business, this type of break-up is not so easily effected because one or two new corporations must be organized. Although there may be more separations of this more desirable type, if competition between gas and electric companies continues to increase, it is unlikely that voting or corporate control of the two services will be voluntarily relinquished.

SOME competition between gas and electricity may stimulate both industries. Some competition even among utility companies doubtless makes for more aggressiveness in utilization of technological changes or serv-

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ice improvements. Management of "pure" gas companies may now be less lethargic, because of the inroads of electricity into what was presumed to be "territory" deeded to the gas industry. It is probable, however, that separation of management and employees into separate corporations for gas and electric business, even though these companies be controlled by the same interests, may prevent this stagnation. At least it seems best to test this sort of division before stockholders as well as officers are ordered to be dissimilar.

Where, moreover, the composite company is pressing consumer acceptance of the most profitable rather than the most suitable service, there is justification for the break-up. But there is scant, if any, evidence that electricity sales have been favored for these reasons.

A minor advantage, furthermore, from the separation would be the greater ease of cost analyses incident to investigation of either gas or electric rates; some costs, particularly managerial and office expenses, are joint for gas and electric sales. Too, this idea might be a backhanded way of securing rate reductions on at least several types of service, reductions which could not otherwise be obtained because of the many legal barriers companies have frequently put before commissioners. This argument in support of the divorcement is remindful of the incarceration of bootleg "kings" for income tax evasions. While the au-

thor condemns the stagnation of utility regulation by fair-value requirements or other related impediments, and although it seems deceitful to use this means of showing better results from regulation, this argument probably should be allowed as one favoring this competitive means of rate control.

No utility company is completely without competitors, but the desirable, prevailing regulatory practice has been an avoidance of whatever competition results in needless duplication of plants or cut-throat pricing. Deliberate attempts of a large number of operators of composite gas and electric companies to avoid competition between these services and the tendency toward sale of gas and electricity for more competitive uses, seem to be inadequate reasons for the proposal that there ought to be divorcement of the now common control of gas and electric sales in the same market.

Such means of forcing lower rates might result in ruinous competition and noticeably discriminatory pricing unless existing means of regulation could control prices for less competitive uses. There is, furthermore, no assurance that gas and electric companies can be forced to compete. It would be no tribute to the commission and fair-value means of rate and service control, which has been made more difficult by the legal barriers erected by companies, if rate reductions were effected in this manner.

"It must be perfectly apparent that nobody will risk much money for the purpose of giving 91 per cent or 60 per cent or even 50 per cent to the government if he succeeds and cannot charge off his losses if he fails."

—BERNARD M. BARUCH,
Presidential Adviser.



Waste in Ill-considered Federal Public Works Projects

Part IV. Grand Coulee Power

In the previous articles in this series the author has discussed certain government programs of expenditures in aid of navigation and irrigation from the standpoint of economics (see PUBLIC UTILITIES FORTNIGHTLY of March 31, 1938, April 14, 1938, and April 28, 1938). In this, the concluding article, Grand Coulee is analyzed from the power angle.

By HENRY EARLE RIGGS

IT has been stated in earlier articles that the Grand Coulee plans provide for two power plants with a rated capacity of 2,500,000 horsepower, with an expected firm power output of 7,000,000,000 kilowatt hours per year, and with secondary power which will be largely used for irrigation pumping of more than 4,000,000,000 kilowatt hours per year.

It has also been shown by the evidence of government engineers that irrigation alone cannot possibly justify the construction of this great plant, and that, in order to make irrigation possible, *all of the firm power that can be produced by the plant must be sold at a profit* to subsidize the reclamation project.

MAY 12, 1938

We may properly seek the answer to four questions:

1. How does this plant compare in capacity with other plants in the United States?
2. What, if any, competing plants exist in the territory to be served?
3. What is the likelihood of finding a market for its output?
4. What elements of cost of production and other matters must be taken into account in fixing rates that will be sufficient to subsidize the greatest irrigation project ever built in the world?

GRAND Coulee dam is located approximately 72 miles south of the Canadian boundary, 80 miles air line from Spokane, 160 miles air line

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from Seattle, 135 miles from Walla Walla in southeastern Washington, and 250 miles from Portland, Oregon.

If this were the only power project of the Federal government in the Northwest, one could reasonably define its tributary territory as being limited to the states of Washington, Oregon, and Idaho. But the government has just completed the first two of ten units of a great and directly competitive plant at Bonneville on the Columbia river, only 40 miles from Portland. This plant is only 180 miles, 20 miles more than the distance from Grand Coulee, from Seattle. It is therefore in position to supplement existing power facilities of the Puget Sound cities (principally publicly owned) even better than Grand Coulee as no mountain ranges have to be crossed by the transmission system.

In addition the Federal government is building another great project known as Central valley in northern California not far from the Oregon state line. The estimated ultimate cost of this project is \$170,000,000. This, with other existing developments located in or serving the state, not only effectively prevents any part of California from being considered as tributary to Grand Coulee, but cuts off from the tributary territory all of southwestern Oregon.

THE building of Bonneville and Central valley plants makes it necessary either to exclude nearly all of Oregon from the territory tributary to Grand Coulee, or to consider that both Bonneville and Grand Coulee are built to serve the three states of Oregon, Washington, and Idaho, and

to treat both as presenting one marketing problem.

The combined population of the three states as shown by the census was

1910	2,140,000
1920	2,572,000
1930	2,962,000

If the same rate of growth continues we may expect a total population in the three states of 4,000,000 in 1950, or about the same as that of New Jersey in 1930; and of 5,500,000 in 1970, or about the same as that of California or Texas in 1930.

There is no present or prospective market other than the three states named, as the territory within a 700-mile radius of Grand Coulee comprises the adjacent states of Nevada, Utah, Montana, and Wyoming, all of which have vast areas of sparsely populated mountain and desert country, the nearest large centers of population being Salt Lake City, 612 miles, Sacramento, 660 miles, and San Francisco, 725 miles, all far beyond any extreme distance for economical transmission of power.

SOME conception of the magnitude of Grand Coulee plant can be had by comparing the horsepower capacity of this one plant with the total horsepower of prime movers of all classes of electric power plants in other states as given by the United States Department of Commerce 1932 Census of Electrical Industries. (See upper table, page 600.)

This one plant will have a greater horsepower capacity than the total present capacity of all steam, water-power, and internal combustion engines of any state in the Union except

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	Total Hp. All Plants	Est. 1932 Population
Grand Coulee plant	2,500,000	
Existing plants, Oregon, Washington, Idaho	2,075,000	3,009,000
Total on completion of Grand Coulee....	4,575,000	3,500,000 (Est.)
New Jersey	1,426,000	4,148,000
Michigan	2,235,000	4,983,000
Ohio	2,916,000	6,753,000
Illinois	3,698,000	7,768,000
Six New England States	3,644,000	8,258,000
(a) 7 West No. Cent. States	3,655,000	13,387,000
(b) 8 Mountain States	1,674,732	3,748,000

(a) Minnesota, Iowa, Missouri, N. D., S. D., Nebraska, and Kansas.
(b) Montana, Idaho, Wyoming, Utah, Nevada, Colorado, Arizona,
and New Mexico.



New York, Pennsylvania, Ohio, Illinois, and California.

AN even more striking exhibit of the magnitude of the marketing problem of the Federal government is found in a comparison of the capacity of Grand Coulee plant only with total generation of energy in various areas. (See table below.)

To compare with these figures we have the most conservative statement that Grand Coulee alone will produce 7,000,000 thousands of kilowatt hours of firm power (disregarding secondary power) and Bonneville another 2,000,000,000 kilowatt hours making the 9,000,000,000 kilowatt

hours used for comparison. The Division Engineer, Corps of Engineers, U. S. A., in estimating his power costs, used as prime power output

Grand Coulee	7,945 million kw. hr.
Bonneville	2,102 " " "
Total	10,047 " " "

If secondary power of the two plants is taken into account in the comparison, the total generating capacity of the two new Federal plants will approximate 15,000,000,000 kilowatt hours. In the light of any study of plant capacity, total energy generated, or sales, only an incurable optimist can see any possibility of marketing enough power from Grand Coulee to enable the plant to take care of its own



State	Thousands of Kilowatt Hours		
	Fed. Census 1932	Edison Inst. 1935	Edison Inst. 1936
6 New England States.....	5,330,234	6,301,555	6,988,792
7 West No. Cent. States....	5,357,887	6,333,994	6,815,780
8 Mountain States	2,346,832	3,330,977	4,009,234
Pennsylvania	6,373,552	8,210,617	9,415,879
Ohio	4,868,954	6,576,989	7,612,467
Illinois	5,446,743	6,048,616	7,455,779
Michigan	3,532,623	4,437,504	5,145,281
Oregon, Wash., Idaho	3,986,671	4,570,281	5,149,831
Prime power only at Bonneville & Grand Coulee....	9,000,000	9,000,000	9,000,000

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operating expenses, depreciation, and interest, let alone being self-liquidating.

A STUDY of the maps of Oregon, Washington, Idaho, and Montana indicates a division of the territory into at least three distinct marketing areas determined by location of population centers and separated by high mountain ranges. The Puget Sound area, with Seattle, Tacoma, and the large population west of the coast range in northern Washington, is the largest and most important.

The Oregon, or Lower Columbia area, including the city of Portland and the section of Oregon along the coast, with a direct opening along the Columbia river through the mountains to eastern Oregon, is next in population and volume of business.

The section of Washington east of the mountains and the state of Idaho constitute the third area. The Yakima irrigation district, in fact the entire Yakima river valley in Washington, is closer to the Bonneville development than it is to Grand Coulee.

Something over a year ago the writer reviewed the reports of the Washington commission, data compiled by the War Department for the Portland area, and studies of Electrical West and reached the conclusion that, at the time of approval of these projects by the government, operating power plants plus units then under construction by the city of Seattle had a capacity of 1,155,000 kilowatts, and that, based on previous peak loads, there was a surplus capacity of 470,000 kilowatts two-thirds of which was in the Puget Sound area. These figures were exclusive of Idaho plants.

As of December 31, 1936, the Edison Institute shows total installed generating capacity of 1,515,002 in the three states, of which 1,136,800 kilowatt capacity is hydro, and 378,200 kilowatt capacity is steam or Diesel, some of which is undoubtedly in small and uneconomical plants.

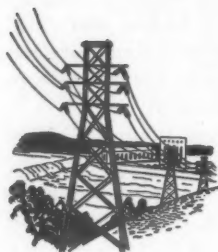
There is in Montana an additional 309,300 kilowatts of installed capacity, making a total of 1,824,300 kilowatts in the four states. The capacity of Grand Coulee is 1,890,000 kilowatts, or more than that now in operation in the four states.

THE cities of Seattle and Tacoma have two of the finest municipally owned plants in the United States. The full, complete, and wholly adequate reports of these plants indicate fine operation and excellent results.

When Seattle first considered public ownership, rates charged were 20 cents per kilowatt hour. They were at once reduced to 12 cents. The city plant began to operate some thirty years ago. Rates put into effect in 1935 were 5 cents for the first 40 kilowatt hours, 2 cents for the next 200 kilowatt hours, and $\frac{1}{4}$ cent for all excess. The city has three hydro plants with a capacity of 215,000 kilowatts and a steam plant with 30,000 kilowatts. The total investment of the city is in excess of \$46,000,000.

The city of Tacoma has more than \$23,000,000 invested in its plant, most of which is in 3 hydro and 2 steam plants. This is one of the most successful municipal plants in the country, with less than \$7,000,000 of bonded debt, and with surplus and reserves of \$18,000,000. The average residential kilowatt-hour revenue is 1.68 cents.

Should Grand Coulee Mark Time?



“THE initial installation at Bonneville is finished. It is only forty miles from Portland. Does not sound business sense dictate that work on Grand Coulee be suspended with the completion of the present contract for the foundation of the main dam, not only to help balance the budget, but to wait and see the results of putting Bonneville power on the market, and to permit the development of the policy that will control in the Federal operation of power plants?”

In 1935 Seattle paid taxes of \$5.48 per \$100 of revenue, and Tacoma paid \$9.91 per \$100 of revenue.

THE privately owned plants of the state of Washington have rates that are fully in line with the low municipal rates of Tacoma and Seattle with the result that the government's new plants will be competing with the lowest rates in the United States in a district served by fine, splendidly equipped, and well managed properties both publicly and privately owned.

The 1935 annual reports make the showing outlined in the table on page 603.

In view of the fact that this average rate includes all costs of generation, transmission, distribution, utilization and general expense, taxes of \$3,480,-480 or \$11.07 per \$100 of revenue, depreciation of \$4,257,918 or \$13.55 per \$100, also interest and amortization of debt, it is evident that not only are costs very low but that these plants furnish a model accounting and statistical system which the government must observe.

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THE Division Engineer, Corps of Engineers, U. S. A., discusses power markets on pages 34 to 72 of House Document 103. His figures are substantially different from those heretofore given. His statement of installed capacity for the two plants is—Grand Coulee 1,575,000 kilowatts, and Warrendale (Bonneville) 836,000 kilowatts, total 2,411,000 kilowatts. His estimate of prime output for Grand Coulee was 7,945,000,000 kilowatt hours, and for Warrendale 2,102,000,000 kilowatt hours, a total of 10,047,000,000 kilowatt hours, and he estimates total annual charges for the two plants at Grand Coulee \$11,063,411, and Warrendale \$6,195,400.

In table H he gives the estimated electrical production of energy in the marketing area as follows:

Millions of Kilowatt Hours	
1930	4,031
1935	6,480
1940	10,230
1945	15,650
1950	22,930
1955	31,830
1960	41,630

These are the estimates characterized by the Board of Rivers and Harbors as “unduly optimistic.” The mar-

WASTE IN ILL-CONSIDERED FEDERAL PUBLIC WORKS PROJECTS

keting area included covers only part of Idaho. The writer cannot make exact comparison, but taking all of the three states the comparative figures in millions of kilowatt hours are

	<i>Estimated "Area"</i>	<i>Actual 3 States</i>
1930	4,031	4,528
1935	6,480	4,570

This is an overestimate of 30 per cent in the first 5-year period.

WHILE it is true that in the Census figures for the United States the industry as a whole shows a 360 per cent increase in power generated between 1902 and 1912, and 600 per cent increase between 1912 and 1932, these years, at least up to 1926 or 1927, were the years of the development of a new industry. The rate of increase in the whole country between 1927 and 1936 was 45 per cent for the decade, and for Oregon, Washington, and Idaho was less than 41 per cent. If we assume that a 50 per cent increase in total generation in a decade is reasonable, the comparison with the Division Engineer's estimate in millions of kilowatt hours would be

	<i>Old Est.</i>	<i>New Est.</i>
1930	4,031	4,031
1940	10,230	6,045
1950	22,930	9,068
1960	41,630	13,602

With the population in 1960 of 4½ million, which is all that can be esti-

mated in the light of past growth, the writer's new estimate of 13,602,000,000 kilowatt hours seems much more reasonable than the Division Engineer's estimate of 41,630,000,000 kilowatt hours when compared with 1936 figures of production. (See table page 604.)

IN interpreting these figures it must be remembered that there is a very large amount of farm use in the West and a great amount of electric energy used in pumping water for irrigation in California, Nevada, Utah, Idaho, Oregon, and Washington. This is reflected in the average kilowatt hours per customer, using government 1932 statistics:

Average for the United States	2,762
Michigan	2,762
Texas	2,927
California	3,144
New England States	2,017
Pacific States	3,347
Oregon	3,130
Washington	4,398
Idaho	3,802

The writer can see no possible justification for the estimates of the Division Engineer. He is convinced that there is no possible ground for hoping that this Grand Coulee plant can be self-liquidating.

IT has been shown in the preceding paragraphs that this great plant is being built to serve an area with a pres-



<i>Source of Statistics</i>	<i>Operating Revenues</i>	<i>Kilowatt Hrs. Sold</i>	<i>Revenue per Kilowatt Hrs. Sold</i>
Private Utilities:			
State Commission	\$24,095,419	2,140,620,076	1.125¢
Seattle City Report	5,156,273	277,309,790	1.851¢
Tacoma City Report ...	2,171,628	218,759,878	0.992¢
Total & Average	\$31,423,320	2,636,689,744	1.192¢

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<i>State or Division</i>	<i>Population Federal Est. 1932</i>	<i>Edison Institute Kilowatt Hours Generated 1936</i>
Michigan	4,983,000	5,145 million kw. hr.
Texas	5,964,000	2,918 " " "
California	5,947,000	9,369 " " "
New England, six states	8,258,000	6,989 " " "
Pacific—Ore., Wash., Calif.	8,509,000	13,822 " " "



ent population of 3,000,000 people; that any national estimate of increase in population cannot be higher than 4,000,000 in 1950, 4,750,000 in 1960, and 5,500,000 in 1970; that on completion of this plant there will be nearly 5,000,000 horsepower of prime movers engaged in electrical production, or more than twice as much in proportion to population as in the most populous and prosperous part of the country; and that the capacity for production of electric energy will be far and away in excess of any demand for it that can now be foreseen.

It has been shown that not only are there existing modern plants, both publicly and privately owned, now serving the area which will be in competition with this plant, but the government itself is building a competitive plant at Bonneville which is closer to the market and more strategically located.

Rates given by the existing plants are the lowest in the United States. The three states have the largest domestic and commercial consumption of energy in the country.

Finally it has been shown that the estimates, described by the Board of Rivers and Harbors as "unduly optimistic," are grossly excessive when measured by actual use of electric energy anywhere in the country.

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And yet this Grand Coulee plant must not only earn enough to be wholly self-supporting and self-liquidating, but in addition "these revenues must contribute to the cost of the irrigation works to avoid injurious burdens on irrigation farmers." (Elwood Mead, Commissioner of Reclamation, House Doc. 103, 73rd Cong., 1st Sess., p. 5.)

AT present the sole objective of this plant is irrigation. But irrigation is only justified if power will pay for it.

The Division Engineer, Corps of Engineers, U. S. A., on page 60, of House Doc. 103, estimates the cost of Grand Coulee dam and power plant with carrying charges at \$204,483,-453. On page 62 he estimates annual charges, based on a 79.5 per cent load factor, as follows:

Operation and current maintenance	\$151,758
Depreciation	665,239
Interest at 4%	8,179,338
Amortization	2,147,076
*Taxes	Nothing

Totals as given by Div. Engr.... \$11,143,411
Annual prime output 7,945,000,000 kw. hr.
Cost per kilowatt hour 1.40 mills.

*The Division Engineer submits two estimates. This one and another using a rate of 6% interest, in which he omits amortization, but adds \$3,518,880 for taxes, with a total annual cost of \$18,200,837, and a cost of 2.29 mills per kilowatt hour.

The one item in the above estimate subject to material variation is that of interest. If interest be placed at 3 per

WASTE IN ILL-CONSIDERED FEDERAL PUBLIC WORKS PROJECTS

cent instead of 4 per cent, and taxes be added, the statement becomes

Total annual cost exclusive of taxes	\$9,098,576
Taxes	3,518,880
Revised total	\$12,617,456

In view of the analysis already given the estimate of 7,945,000,000 kilowatt hours is far in excess of any possible amount that can be sold. The problem is to make a rate high enough not only to do all the things included above, every one of which is a proper item, but to add something of the order of \$7,000,000 to \$10,000,000 a year more to cover carrying charges on the irrigation works, and to compute it in terms of cost per kilowatt hour sold to ultimate consumers. If that added cost be placed at \$7,000,000, giving a final total of \$19,617,000, and estimate made on several possible amounts sold, the resulting rates would approximate:

On a sale of 4,000,000,000 kw. hr. per year	4.904 mills per kw. hr.
On a sale of 5,000,000,000 kw. hr. per year	3.923 mills per kw. hr.
On a sale of 6,000,000,000 kw. hr. per year	3.269 mills per kw. hr.

When all other costs of transmission, distribution, general expense, etc., are added, these rates for wholesale power appear too high to be attractive.

THE initial installation at Bonneville is finished. It is only forty miles from Portland. Does not sound business sense dictate that work on Grand Coulee be suspended with the completion of the present contract for the foundation of the main dam, not only to help balance the budget, but to wait and see the results of putting Bonneville power on the market, and to permit the development of the policy

that will control in the Federal operation of power plants?

Certainly all work on it ought to be suspended until the Congress can secure a report from a board composed of thoroughly qualified, nationally known, and wholly disinterested electrical and hydraulic engineers who are free from the bias of either pro-public ownership or anti-public ownership activities, and who thoroughly understand electric power problems. Such a board, if given time to thoroughly study the existing and potential units, the statistics of operation, and the market possibilities of the Northwest, should be able to say whether Grand Coulee power can be sold at all, and if so, whether it can bring a price that will warrant the building of the reclamation plant.

OBJECTION will be made that work is now in progress, contracts have been let, and all that is done will be lost. The original contract for \$63,000,000 for a low dam and power plant was changed by the Bureau of Reclamation to a contract for the foundation of the main dam. Press reports in November, 1937, stated that contracts were about to be advertised for completion of the plant. The Congress has not acted on this matter with full knowledge of the magnitude of it. Kenneth B. Keener, senior engineer of the Bureau of Reclamation, in a paper published in *Engineering News-Record*, issue of Aug. 1, 1935, pages 141 to 143, said:

Completion of the Grand Coulee high dam is a problem for the future and one that needs not be given serious consideration until the work now under contract is nearing completion. Conditions and requirements of that time will no doubt govern the next step to be taken in the development of the Columbia Basin project.

PUBLIC UTILITIES FORTNIGHTLY

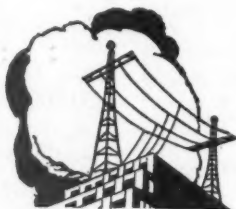
Now is the time for *serious consideration by Congress*, something which this great project has never had. The foundation for the high dam will be in place. It can be built upon just as well ten, or fifty, or a hundred years hence as now.

IN the foregoing discussion the assumption has been made that estimates of cost will not be exceeded. But Bonneville initial installation cost \$52,000,000, not the \$30,000,000 estimated. Fort Peck dam cost \$110,000,000, not the \$60,000,000 estimated by the Chief of Engineers or the \$80,000,000 given out as the probable cost when the work was started. Is there any reason to suppose that this, the

greatest single construction ever undertaken by man since the beginning of the world, will fare any better? The writer thinks it doubtful.

Is there any assurance that all costs of interest during construction paid by the taxpayers will be included in the statement of cost? Already nearly \$50,000,000 of the cost of this foundation appears as charged to Columbia Basin Reclamation.

Right now, when the President is looking for places to cut expense; right now, when balancing the budget is the most important step in restoring confidence in the financial soundness of the nation, is the time to study this project, and to be absolutely certain that it is sound before going on with it.



Coming Features

The State Commissions and Public Utility Rates

BY HENRY C. SPURR



Is Reproduction Cost Becoming Obsolete?

BY LUTHER R. NASH



The Public Ownership Drive in Pennsylvania

BY JOHN H. FERGUSON

MAY 12, 1938

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Wire and Wireless Communication

SPADE work has been about completed by the Federal Communications Commission for formal inquiries into (1) the request by fifteen radio broadcasting units for authority to increase the permanent power of their stations to 500 kilowatts, as well as the allocation of power to other stations; and (2) the question of monopoly and chain broadcasting. The first (or super-power) subcommittee, which now is scheduled to begin hearings on June 6th, is composed of Commissioners Norman S. Case as chairman, T. A. M. Craven as vice-chairman, and George Henry Payne. Chairman Frank R. McNinch personally will be in charge of the subcommittee investigating the questions of monopoly and chain broadcasting, to which have been assigned Commissioners Paul A. Walker, Eugene O. Sykes, and Thad H. Brown. Hearing of testimony in this inquiry is slated to begin early in June, according to Chairman McNinch.

MANY problems involving future policies in handling radio broadcasting must be decided after the hearings end in the case of applications for a wider radius. In fact, the whole wireless picture may be altered by these decisions.

One important feature of this inquiry is that its original scope has been widened. When first announced, the subcommittee was limited to an investigation of the possible effects of super-power on the industry. Now its rules have been amended to include the allocation of power to hundreds of other stations. This will mean more extensive sessions which could carry the hearings well into the

summer before they are finally ended.

The commission will determine if objectionable interference will be caused to the existing service by increasing the power limits of stations now assigned to clear channels by the commission's Rule 116, and the nature and extent of the limitation, if any, of the service area of other classes of stations. Likewise, it will seek to learn whether this increased power will be greater than any limitation of service that may result to other stations by reason of interference. Another query deals with the extent to which an increased power on clear channels will enlarge the primary and secondary service areas of clear channel stations generally and improve their service. The commission also must decide if there exists a real need for this high power, and, if that is true, then in what areas such need exists. Also, it must determine if higher power will have a tendency to concentrate economic or social power or influence in the clear channel stations, and, if so, what effect that may have upon the stations as well as the public.

Then the matter of higher financial charges and their effect upon the programs given must be decided, as well as the possibility of duplication of service through interlapping of areas covered, and whether all rural areas will be adequately served by the proposed maximum power. Other points to be gone into are: a query as to the habits of listeners and their ideas on the requested changes; the fair distribution of power among the states; the extent to which it would be wise to grant greater power; and if the increase would be in the public interest.

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Practically all of the smaller stations will oppose this creation of a clear higher channel, because they claim that will result in their loss of a great part of country-wide broadcasting and advertising revenue. They have invested millions of dollars in the industry, and naturally will battle any move to hamper their stations. The National Association of Regional Broadcast Stations has announced, through its executive committee, that it will strenuously oppose this request because such operation will concentrate too much power in a small number of stations.

Opposing this formidable group of "little men" will be representatives of larger interests who see in this means an opportunity to widen the scope of their facilities and make a play for concentration of the advertising done on a national scale. They argue this planned extension will not hinder the small stations and circuits from continuing with their local programs and advertising, and say it will be best to confine national publicity to a few companies that will be able to render this service without working through the minor media.

THE commission has notified broadcasters throughout the United States of the inquiry and has thrown open the door to everybody having objections to the proposal, with the sole provision that an outline of the objectors' complaints, as well as the arguments for the proponents, must be filed with it within thirty-six days of the mailing of the notice of hearing.

Station WLW, operated by the Crosley Radio Corporation at Cincinnati, is the only one in this country now using a 500-kilowatt channel after nightfall. It has been employing this high wattage since April 17, 1934, and is said to cover about thirteen states. Its charges for service are \$1,200 for one-hour broadcasts, \$800 for a half-hour period, and \$532 for fifteen minutes. About the same amounts are charged for time over WEAJ and WJZ (National Broadcasting stations in New York) and WABC (Columbia Broadcasting station, also in

New York), though Bamberger Broadcasting System taxes its clients only \$1,045 an hour for night service over Station WOR (Newark, N. J.), which uses the Mutual Broadcasting chain. These four last-named stations, along with many others, are restricted to 50 kilowatts.

Other companies seeking places on the 500-kilowatt channel are: Central Broadcasting Company (WHO), Des Moines; National Broadcasting Company (WJZ), New York; WGN, Inc., Chicago (*Chicago Tribune*); Louisville *Courier-Journal* and Louisville *Times* companies (WHAS), Louisville, Ky.; Earl C. Anthony, Inc. (KFI), Los Angeles; WJR, The Goodwill Station, Detroit; National Life & Accident Insurance Company (WSM), Nashville, Tenn.; Westinghouse Electric & Manufacturing Company (KDKA), Pittsburgh; Bamberger Broadcasting Service, Inc. (WOR), Newark, N. J.; Western Broadcasting Company (KNX), Los Angeles; Southland Industries, Inc. (WOAI), San Antonio; General Electric Company (WGY), Schenectady; Radio Service Corporation of Utah (KSL), Salt Lake City; and Atlanta *Journal* Company (WSB), Atlanta.

Meanwhile, the reallocation of broadcast facilities, as provided by the Havana treaty (between Canada, Cuba, Mexico, and the United States), remains in the files of the Department of State. Chairman McNinch has asked that it not be acted upon for the time being by the Senate.

ALTHOUGH Chairman McNinch is ex-officio head of both committees formed of members of the Communications body, he will take more than a passive part in the inquiry into charges of monopoly in the broadcasting industry that have been bruited about in Congress and the United States for years. The staff of the committee has been directed to report at the earliest possible date on the list of all contracts relative to chain broadcasting now in the files of the commission, and to prepare an analytical summary of the terms of these for the actual

WIRE AND WIRELESS COMMUNICATION

hearings. This paper work is about completed.

A complete survey of the industry, with special attention to charges of monopoly, is promised. Commissioner Craven handled the *Report on Social and Economic Aspects of Broadcasting*, filed with the commission on January 20, 1938, and the problems for inquiry listed in this gigantic document will be among the bases for this investigation. On March 16, 1938, Commissioner Craven issued a statement saying:

Recently there have been many criticisms and charges with reference to alleged shortcomings of the existing application of radio to the service of the public. Therefore the time has come when complete facts and data are necessary to establish the truth or falsity of such charges. This is essential in the interest of the public as well as for the stabilization of an industry which in general has rendered excellent service to the American public. It is also essential to secure other information of an economic character which will result in a clearer understanding of the complex problems involved in the application of radio to the service of the public, and lead to more far-sighted regulation than is possible at present.

Following Commissioner Craven's observations, the commission seeks knowledge as to the contractual rights and obligations of stations in chains resulting from their network agreements, as well as the extent of the control of programs, advertising contracts, and other matters actually exercised by those stations. The nature and extent of network program duplication by stations serving the same areas, and agreements for exclusive network hook-ups to the exclusion of other feeders also must be explained. Policies by national chains relating to programs and diversifications will be carefully scrutinized. Other queries will be made as to the number and locations of stations licensed to or affiliated with networks, the specified time which the networks control through their affiliates, and the actual time used by such chains.

The commission also will consider the rights and obligations of stations engaged in chain broadcasting with respect to ad-

vertisers under network contracts. Another question relates to the nature of the service rendered by each station licensed to a chain, particularly with respect to the amount of the program originated for the network by the station. Then, the existing competition between chain and independent broadcasters will be thoroughly explored.

One of the most important matters that will be kept to the fore during these hearings involves the trend toward monopolistic practice which a comparatively few high-powered clear channel stations may create. This possible tendency tied the monopoly inquiry to that for superpower, but it was found more convenient to separate them so far as the actual hearings are concerned, but to keep each in mind when the time for decision comes. Opponents of those stations wishing a greater wattage than 50,000 (50 kilowatts), say these fifteen applicants aim to corral all the national advertising, that this is a move in restraint of trade, and will, if allowed, tend to weaken the smaller fellows by restricting their advertising and hook-ups.

In its hearing on monopoly, the commission undoubtedly will keep in mind a bill by Senator Wheeler (S. 3875, introduced April 20, 1938) declaring it is the "policy of the Congress to prevent monopoly and to encourage competition in the direct foreign radio telegraphic communications." The Montana member said the commission recently had indicated, by denying licenses to the Mackay Company in fields in which Radio Corporation of America operated, that it believed Congress intended a monopoly. This was not the case, he declared, but competition must be maintained. The commission has taken the position that the amount of foreign business is not sufficient, in some cases, for healthy competition.

UPON the completion of hearings in these two investigations, the members of each subcommittee will hold extensive executive sessions to make up their findings and recommendations. These will be submitted to the full Fed-

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eral Communications Commission, which will pass on the final decision.

* * * *

It is possible that the American Telephone and Telegraph Company may be accorded the right to file its counter-argument to Commissioner Paul A. Walker's preliminary survey of its affairs for the Federal Communications Commission before that body completes its final report to Congress. A brochure has just been issued containing the Bell System's answers to exhibits filed at the hearings, and the company also has made public in 42 pamphlets its replies to 270 allegations which were filed but not received and considered by the examiners.

There is doubt in some minds within the commission itself that it was entirely wise to exclude the company from introducing evidence or cross-examining opposing witnesses in the extensive hearings held in Washington. Of course, most of the commissioners hold to the view that those sessions were of an investigatory nature; that they were in no sense a trial of the telephone industry, but merely an exploratory duty done at the behest of Congress. Yet the thought has been expressed that any exploration excluding the "man on the spot" from having his say was not fair, either to the one investigated or to Congress, because the report could be considered as being biased.

This is only one phase of the investigation that is puzzling the commissioners. They realize that if any report—and they are quite positive in pointing out that Mr. Walker's document must be considered only as a more or less initial review of the evidence plus the opinions of the examiners—goes to congressional eyes without the opinions of the company, the commission may be hauled over the coals in Senate and House as being one-sided in its judgments. It is impossible to predict what might happen if a commission member were to demand that the telephone people be given this leeway, but it is known that it would meet with stern opposition from those who believe no further papers are needed. One point

against it will be that it is folly to reopen an inquiry for one side without the presence of witnesses for the other—and almost all of those who testified for the government at the extended hearings have left the service. The commission is without funds for any further formal sessions, and it is certain that no move will be made for supplementary money from Congress.

When the A. T. & T. stockholders unanimously passed (April 20th) their resolution condemning Mr. Walker's conclusions, they spoke for approximately 675,000 persons in all walks of life. President Walter S. Gifford later was asked what would happen if the company were forced to cut its rates 25 per cent, and he answered that there would be nothing left to pay dividends, whereupon a woman investor exclaimed that 400,000 women holding stock would see that this condition is not permitted to exist. All of which shows what at least a part of the public thinks. This reaction may have some influence upon the commission's report, although naturally one could not in an intensive search find a member to admit it. But it is true that the more outspoken Congress becomes on many phases of the government, the more jittery becomes the feeling in the Federal Communications Commission. After all, its members are creatures of politics, and few politicians knowingly will incur the open displeasure of both legislators and a vociferous part of the public.

What is more, some insiders doubt if the entire commission has read the Walker report, let alone made efforts to digest it thoroughly. No serious attempt has been made by the members to weigh Mr. Walker's conclusions before reaching a final judgment. He has placed many questions before them, in both the text of the report and his conclusions. Some members question certain sections of both. Intensive study for weeks on end is necessary to grasp the entire subject matter, and numerous conferences must precede a decision. Other inquiries relating to the general subject of communications may bar the way to an early settlement of the final telephone report.

Financial News and Comment

By OWEN ELY



Public Versus Private Utility Financing

THE recent \$60,000,000 issue of Consolidated Edison debenture 3½s of 1948 proved highly successful despite a somewhat disappointing advance interest. As one newspaper commented, "the demand began to roll up like a snowball, and the problem soon became one of allotments." The issue went to a half-point premium, and the company's common stock also reflected the success of the offering by a sharp advance.

It now appears likely that many delayed plans for utility financing will be taken "off the shelf" for renewed study.

Swollen bank reserves resulting from the administration's inflation program have caused a sudden demand for government and municipal issues, which in turn should greatly improve the market for high-grade corporate bonds.

Meanwhile, President Roosevelt has discussed with RFC Chairman Jesse Jones a proposal that the commission buy the securities of utility companies to aid them in a construction program. Referring to the new RFC \$1,500,000,000 fund authorized by Congress, Mr. Jones remarked somewhat disparagingly "there has been a lot of talk of the utilities not getting any money, and we are including them among the small business men." He stated that he already had received several applications from small utilities.

Possibly 10-year RFC loans at a reasonably low interest rate might appeal to some of the small utilities, or even to larger systems which have been going to the banks for loans running two to four years. Chairman Douglas of the SEC indicated that he would cooperate with Mr. Jones in working out a program.

He stated that some large securities issues were already under discussion, but it was not clear whether he referred to private or public financing.

Mr. Jones refused to indicate definitely whether junior securities would be accepted by the RFC as collateral. During President Roosevelt's conferences early this year, when a broad program of utility construction was under discussion, the utility executives pointed out the need for financing a large part of their future requirements through the use of junior securities or common stock issues.

The utilities have recently felt some apprehension that the government's new spending program might include the revival of PWA loans for municipal construction of competing utility plants. Nothing very definite on this is yet forthcoming, as the President has not yet conferred with Mr. Ickes regarding the details of the new program.

1937 Bond Offerings Show Large Price Gains

A REVIEW of the more important utility bond issues (over \$5,000,000) offered last year indicates that with a few exceptions they are selling currently at substantially higher levels than the offering prices. In some cases these gains amount to six or seven points. Even the offerings made late last year, such as the St. Joseph Railway, Light, Heat & Power first 4½s of 1947, show fair-sized gains. (See table on next page.)

In only one case—that of an industrial gas bond—was there a sharp drop in the market price. Considering the vicissitudes to which the security markets have recently been subjected, these facts indi-

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cate the popularity of utility bonds and augur well for the completion of the industry's refunding program—now about two-thirds or three-quarters completed.

It is interesting to note that the companies' underwriting costs on these larger issues averaged about half a point to a point, the amount varying considerably. Underwriters' profits were in almost all cases a flat two points (one small issue amounted to three and a half points).

Federal Power Program Receives Setback

A RECENT threat to the government's power program was the decision of the U. S. District Court of Virginia in the Appalachian Electric Power Company Case. Officials of the Federal Power Commission are quoted in the press as fearful that the decision will jeopardize not only the administration plans for flood and soil erosion control under the pending regional planning bill, but also Federal control over scores of hydroelectric developments carried out or projected under the Federal Water Power Act of 1920. One effect, it was said, would be to hold up action on 135 pending applications by utility companies for licenses to undertake hydroelectric developments.

The decision in effect held that the Federal government lacked power to regulate waters of nonnavigable rivers for flood or erosion control. Some experts thought that the decision swept away the commission's claimed authority over hydroelectric developments on non-navigable rivers, leaving only the long-established power of the War Department to regulate navigable streams. However, the issue will doubtless be appealed to the higher courts.

The immediate question in the Appalachian case was whether the company was compelled to obtain a license to build a hydroelectric dam on the New river, near Radford, Va. A license would subject the company to regulation by the commission in the matter of accounting, amortization of investment, and rates.

TVA Issue to Supreme Court

EIGHTEEN subsidiaries of Commonwealth & Southern Corporation, Electric Bond and Share Company, and other companies have appealed the TVA issue to the Supreme Court. In January the three-judge Federal court of appeals at Chattanooga denied the companies' claims of injury resulting from Federal competition. It was notable that the decision of the lower court contained no

Amount (Millions Dollars)	Security (Arranged in order of offering dates)	Approx. Offering Date	Issue Prices			Price Range		
			Net to Company	Price to Under- writers	Price to Public	1937 High	1937 Low	1938 Approx. Apr. 22
5.1	North Shore Gas 1st 4s 1942.....	Jan. 11	95.54	97.00	100.00	99.00	81.50	75.00*
18.0	Atlantic City Elec. gen. 3½s 1964 Feb.	5	98.42	99.00	101.00	100.00	94.50	99.50
16.0	Dallas P. & L. 1st 3½s 1967.....	Feb. 10	100.01	100.75	102.75	105.50	99.50	106.25*
75.0	No. States Power 1st 3½s 1967...Feb.	11	98.39	99.00	101.00	101.00	94.12	101.00
130.0	Phila. Electric ref. 3½s 1967...Mar.	11	99.95	100.50	102.50	106.50	102.00	107.25
24.0	Panhandle East. P. L. 1st 4s 1952.Mar.	30	95.02	95.50	97.50	101.62	97.00	98.75
10.0	Cincinnati G. & E. 1st 3½s 1967...June	3	99.78	100.50	102.50	107.00	102.50	107.50
17.0	Buffalo Niag. Elec. gen. 3½s 1967..June	25	98.80	100.00	102.00	105.75	101.87	108.00
80.0	Union Elec. 1st & coll. 3½s 1962...June	28	97.52	98.00	100.00	107.37	100.00	107.00
25.0	Westchester Lightg. gen. 3½s 1967.....	July 22	99.48	100.50	102.50	102.50	96.37	101.25
28.9	Ohio Public Service 1st 4s 1962...Aug.	26	99.96	100.64	102.63	101.00	92.25	101.50
8.5	Ohio Edison 1st 4s 1967.....	Sept. 28	97.74	98.25	100.50	101.62	100.87	101.50
48.4	Central N. Y. Power gen. 3½s 1962 Oct.	6	96.06	97.00	99.00	104.12	92.50	104.50
18.0	Idaho Power 1st 3½s 1967.....	Oct. 6	95.82	96.50	98.50	100.87	96.50	103.00
5.0	Potomac Elec. Power 1st 3½s 1966 Nov.	26	99.76	100.00	(a)	106.12	100.00	105.50
5.6	St. Jos. R. L. H. & P. 1st 4½s 1947 Dec.	29	94.38	96.00	99.50	99.62	99.25	102.00

(a) Privately sold.

* Bid price.

statistics on TVA plant costs, division of cost burden between navigation and electric output, "yardstick" rates, etc. In other words, the decision was based on narrow legal grounds, without considering the all-important financial considerations and economic factors. It is to be hoped that the Supreme Court will take full cognizance of the financial data which were barred from the record by the lower court.

The appeal was filed during an indefinite recess in negotiations between David E. Lilienthal, TVA director, and Wendell Willkie, president of Commonwealth & Southern, for the sale of certain private power systems to TVA and municipal governments.

The record in the TVA case is so large that court officials expressed doubt whether it could be printed in time to permit oral argument of the litigation May 2nd, as previously expected. This raised doubts as to whether the justices could decide the issues before adjourning for the summer. The court was expected to stop hearing arguments in cases generally about May 2nd, and devote the remainder of the time before it adjourns—around June 1st—to the preparation of opinions.

Meanwhile, TVA excitement in Congress has quieted following completion of the joint committee of investigation. Ex-chairman Morgan has not yet indicated what steps he may take to reclaim the position from which President Roosevelt ousted him.

Management Service at Cost

OVER the past year or so, a number of changes have been made by the large utility holding companies with regard to assessing management costs against operating subsidiaries. Some of these changes are summarized by the *New York Herald Tribune* as follows:

One provision of the Public Utility Holding Company Act requires that holding companies render services to subsidiaries at cost. In complying with this provision, Electric Bond and Share Company has announced that it no longer would charge a profit on such services, which means that the parent

company will lose a certain amount of net income. In cases where subsidiaries are wholly owned, it makes no difference if parent companies charge fees for services, since the saving to subsidiaries would be passed back to the parent in the form of dividends. With Bond and Share, however, its subsidiaries are only partly owned and there are arrears on some outstanding preferred stocks which must be cleared before dividends are paid on the junior equities. Not all companies will be similarly affected by this legislation, since some have not been in the practice of charging subsidiaries for services. North American Company has been outstanding among the latter. Associated Gas and Electric has a set-up whereby Utilities Management Corp., a service company, is mutually owned by operating concerns in the Associated system. There is some speculation, however, as to whether service companies controlled by Hopson interests will be involved.

Acting Chairman Seavey of the Federal Power Commission has expressed "astonishment" at the delay granted by the U. S. Supreme Court to Associated Gas & Electric Company in preparing its reply in the Metropolitan Edison case, which involves the commission's power to investigate service contracts between Pennsylvania subsidiaries of the Associated system and affiliated Hopson service companies.

Steam versus Hydro

GENERAL Hugh S. Johnson, former New Dealer turned columnist-critic, writing in the *World-Telegram* in his usual terse and vigorous style, condemns the administration's hydroelectric expansion policy. While the data may not be new, the General's excellent review seems worth summarizing:

He points out that the idea of "white coal," which intrigued the public for many years because of the popular assumption that hydro was far cheaper than steam power, has become wholly obsolete. In the old days it required eight times as much coal to produce a kilowatt hour as it does today, and as a result hydro power now costs 50 to 100 per cent more than steam in comparable modern plants. This despite the fact that coal combustion is still only 65 per cent efficient, com-

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pared with 90 per cent for water power.

At the time the hydro idea gained its original popularity, it was felt that our coal resources would not last over two hundred years, but now a 4,000-year supply is seen available.

Production of hydro power requires little man power; steam requires ten times as much, so that to improve employment the latter should be favored. Also, the transport of coal affords increased rail labor.

The government's present hydro program is handicapped by its lack of authority to build stand-by steam plants; since power production is a by-product of navigation and flood control, logically it must be limited to hydro. Yet the lack of stand-by plants is an obstacle to efficient distribution. According to the General, a Pacific coast city failing to obtain its water-produced electricity had to call on the Federal government to send a warship into the harbor to provide electricity by steam. He also points out that silting behind dams may prove a future handicap to water-power installations.

In conclusion he states that the actual cost of generating electricity is only about one-sixth of the retail price. Therefore, the question of installing hydro

plants is, in itself, of minor significance. The trouble is that it gives the government an excuse for subsidizing distribution of electricity by grants to municipalities despite the fact that there is no justification whatever for such subsidies.

The *Electrical World* for March 12th contains an abstract of the detailed comparisons of steam and hydro costs presented by Frank F. Fowle at the Fuel Engineering Conference in Atlanta. Mr. Fowle dealt at length with the question of subsidized hydro power.

Electric Output Comparisons Show Wide Variation

CHANGES in current weekly output of electricity, as compared with last year's corresponding weeks, show some wide variations for individual systems. It is surprising to note that a number of systems — Consolidated Edison, Engineers Public Service, Middle West Corp., Northern States Power, Pacific Gas and Electric, Southern California Edison, and United Light & Power—were able to show gains over last year in the week ended April 9th. On the other hand, companies in highly industrialized areas,



Systems:	Apr. 9	Apr. 2	Mar. 26	Mar. 19	Mar. 12	Mar. 5	Feb. 26	Feb. 19	Feb. 12	Feb. 5	Jan. 29
Amer. Power & Lt.	-9.9	-8.2	-9.2	-9.6	-7.9	-6.3	-3.2	+0.1	+0.8	+3.0	+2.7
Amer. Water Wks.	-20.4	-20.6	-23.0	-23.3	-22.9	-21.4	-23.7	-24.6	-24.1	-24.5	-21.6
Asso. Gas & El.	-6.0	-4.9	-8.6	-6.6	-8.2	-6.9	-5.8	-6.1	-7.1	-6.7	-7.7
Boston Edison	-5.2	+0.4	-5.4	-2.3	-4.0	-2.8	-2.9	-3.7	-4.9	-3.4	-3.2
Col. Gas & El.	-12.6	-15.8	-14.1	-13.8	-13.1	-12.5	-7.8	-10.4	-3.8	*40.5	*79.8
Com'nw'th Edison	-8.0	-11.3	-11.5	-9.4	-10.0	-6.1	-8.0	-6.0	-7.0	-5.1	-3.4
Com'nw'th & Sou.	-13.9	-16.8	-17.5	-16.6	-15.0	-15.6	-13.9	-12.4	-10.8	-9.0	-10.3
Con. Edison	+4.0	+3.6	+0.5	+2.3	-0.7	+4.3	+3.2	+2.6	+3.8	+3.8	+4.0
Con. Gas of Balto.	-0.2	+0.2	-4.5	-0.5	-3.4	-0.5	-1.2	-2.9	-0.6	-2.8	-1.5
Detroit Edison	-19.3	-19.3	-21.1	-17.4	-21.9	-25.9	-26.7	-23.3	-23.3	-25.2	-22.7
El. Power & Lt.	-3.0	-5.5	-3.6	-1.5	-1.8	-4.6	-2.4	-2.4	+0.8	-1.8	-0.8
Engrs. Pub. Serv.	+1.7	+5.3	+2.5	+4.0	+4.1	+2.4	+1.2	+2.1	+3.4	+2.4	+0.6
Mid. West Corp.	+3.1	+1.8	-1.2	-1.1	-2.2	+1.3	+1.6	+1.6	+3.1	+5.3	+1.9
Natl. Power & Lt.	-1.4	+9.3	+1.0	+2.2	-6.6	-11.5	-9.4	-8.5	-13.6	-12.3	-13.1
New Eng. Power	-14.9	-16.1	-15.2	-17.9	-15.9	-12.6	-13.1	-12.2	-13.4	-14.2	-12.8
Niag. Hud. Pwr.	-16.6	-14.0	-15.9	-15.7	-16.5	-14.3	-14.4	-13.1	-13.4	-11.6	-10.5
N. American Co.	-7.9	-7.9	-10.8	-8.8	-8.4	-7.3	-6.2	-6.9	-9.2	-7.7	-9.7
North. Sta. Pwr.	+2.1	+3.1	+2.6	+0.3	-0.4	+2.4	+0.9	+2.0	+3.1	+3.5	+2.0
Pacific Gas & Elec.	+1.4	-0.9	-5.1	-3.3	+0.5	+2.9	+0.8	+4.9	+1.4	+2.8	-2.6
Pub. Service, N. J.	-6.0	-3.0	-11.8	-5.7	-6.8	-4.3	-3.0	-4.0	-5.7	-4.1	-4.3
South. Cal. Edison	+5.1	+2.4	-0.1	-1.3	+1.0	+5.1	-0.2	+3.4	+1.4	+1.5	-1.2
Stand. Gas & Elec.	-7.2	-7.1	-7.9	-9.2	-6.6	-3.9	-5.4	-4.1	+0.8	-2.5	+5.7
United Gas Imp.	-5.1	-6.1	-8.8	-6.9	-7.8	-3.9	-5.7	-6.4	-5.7	-5.6	-4.2
United Lt. & Pwr.	+1.5	+0.8	-2.1	-0.2	+0.1	+0.4	+0.9	+2.3	-0.5	-1.3	-1.8
United States	-8.5	-7.8	-10.2	-8.7	-9.0	-7.5	-8.0	-6.9	-6.7	-5.4	-5.2

* Floods interrupted service, 1937 week.

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such as American Water Works, Commonwealth & Southern, Detroit Edison, and Niagara Hudson showed large declines. The accompanying table for 24 systems was prepared by *The Wall Street Journal*.

SEC to Curb Sales of Assets

THE sale of utility securities and of utility assets owned by public utility holding companies was brought directly under the supervision of the Securities and Exchange Commission on April 19th by the promulgation of a new rule under §12(d) of the Public Utility Holding Company Act. This section authorizes the SEC to make such rules and regulations felt to be necessary.

By the action of the commission, taken because virtually all the holding companies have now registered with it, applications must first be made on prescribed forms and the commission's approval obtained. There are some exemptions, including the sale of any security the seller of which owns less than 5 per cent of those outstanding, and certain types of securities, and of assets where less than \$50,000 is involved.

No order of the commission approving or disapproving an application, it was stated, would issue until a public hearing had been granted; and the commission would approve the application only upon finding that the terms and conditions of the sale would not be detrimental to the interest of investors or consumers and would not tend to circumvent any provisions of the act.

Corporation Notes

PRESIDENT McCarter of Public Service Corporation of New Jersey indicated at the annual stockholders' meeting in April that the company might reduce its dividend rate on the common stock from \$2.60 to between \$2.00 and \$2.40. He expressed confidence that the rate would not drop below \$2.00 and pointed out that the company is comfortably earning fixed charges and preferred dividends. In the twelve months ended March 31st, \$2.48

a share was earned, compared with \$2.74 in the preceding twelve months. Mr. McCarter pointed out that, despite the depression, taxes for 1938 were expected to increase to \$24,000,000, which amount would be equivalent to nearly one-fifth of 1937 revenues.

ERRATUM, *Re Public Service Electric & Gas*: In the table on Utility Preferred Stocks, page 548 of the April 28th FORTNIGHTLY, Public Service Electric & Gas \$5 preferred was listed with a current price of 88 and a yield of 5.7 per cent. This should have been a price of 112 and a yield of about 4½ per cent.

President Gifford at the American Telephone meeting stated that the company is not contemplating any financing at this time. He pointed out that taxes now amount to over \$9.00 per telephone and \$7.00 per share, with an estimated increase of about \$9,000,000 for 1938. Replying to a stockholder's inquiry regarding the possible effect of a 25 per cent rate reduction, as proposed by the FCC report, Mr. Gifford stated that such a reduction would leave no earnings. Stockholders indicated very clearly their dissatisfaction with the FCC report.

Detailed studies of the Tennessee Electric Power Company, chief operating subsidiary of the Commonwealth & Southern, are being made, and TVA Director Lilienthal reported to President Roosevelt April 27th that he soon expected to be in a position to resume conversations with Wendell L. Willkie, president of the Commonwealth & Southern. In the same connection, Jo C. Guild, president of TEP, said in his annual statement to stockholders:

It is hoped that a satisfactory conclusion can be reached and that the facilities privately owned which are taken over for governmental operation will be paid for at the amounts legitimately invested therein, and not at such a fraction of their value as they might be purchased under threat of duplication. Such a policy of making proper payments would restore confidence of investors in public utilities' securities and do more to enable the utility companies to sell securities to finance expansion programs...

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INTERIM EARNINGS STATEMENTS

	No. of Months Included	End of Period	System Earnings per Share (a)			
			Last Period	Previous Period	Per Cent Increase	Per Cent Decrease
<i>Electric and Gas</i>						
American Gas & Electric	12	Feb. 28 (b)	\$2.46	\$2.20	12%	..
American Power & Light (Pfd.) ...	12	Nov. 30	6.36	5.92	7	..
American Water Works	12	Dec. 31	1.14	1.52	..	25
Boston Edison	12	Dec. 31	8.72	8.38	4	..
Cities Service P. & L. (Pfd.)	12	Sept. 30	21.39	12.31	74	..
Columbia Gas & Electric	12	Dec. 31	0.57	0.53	8	..
Commonwealth Edison	12	Dec. 31	2.45	1.90	29	..
Commonwealth & Southern (Pfd.) ..	12	Feb. 28 (b)	9.38	9.50	..	1
Consolidated Edison, N. Y.	12	Mar. 31 (c)	2.24	2.48	..	10
Consolidated Gas of Baltimore	12	Feb. 28	4.56	4.44	2	..
Detroit Edison	12	Mar. 31	6.57	8.33	..	21
Electric Power & Lt. (1st Pfd.)	12	Nov. 30	12.35	10.29	20	..
Federal Light & Traction	12	Dec. 31	2.71	2.61	4	..
Inter. Hydro-Electric (Pfd.)	12	Dec. 31	15.63	6.82	129	..
Long Island Lighting (Pfd.)	12	Dec. 31	4.82	8.19	..	41
Middle West Corp.	9	Sept. 30 (c)	0.40	0.39	2	..
National Power & Light	12	Nov. 30	1.33	1.00	33	..
Niagara Hudson Power	12	Dec. 31	0.84	0.81	4	..
North American Co.	12	Dec. 31	1.95	1.74	12	..
Pacific Gas & Electric	12	Dec. 31	2.71	2.55	7	..
Public Service Corp. of N. J.	12	Mar. 31 (b)	2.48	2.74	..	9
Southern California Edison	12	Dec. 31	2.18	2.42	..	10
Standard Gas & Elec. (Pr.Pfd.)	12	Jan. 31 (b)	6.62	7.77	..	15
United Gas Improvement	12	Dec. 31	1.05	1.04	1	..
United Light & Power (Pfd.)	12	Feb. 28	8.22	8.00	3	..
<i>Gas Companies</i>						
American Light & Traction	12	Feb. 28	1.72	1.72
Brooklyn Union Gas	12	Dec. 31	2.57	3.02	..	15
Lone Star Gas	12	Dec. 31	1.14	1.02	12	..
Pacific Lighting	12	Dec. 31	4.10	3.88	6	..
Peoples Gas Light & Coke	12	Dec. 31	3.65	3.21	14	..
United Gas Corp. (1st Pfd.)	12	Nov. 30 (b)	23.99	25.66	..	7
<i>Telephone and Telegraph</i>						
American Tel. & Tel. (d)	12	Mar. 31 (c)	9.36	9.85	..	5
General Telephone	12	Dec. 31	1.59	1.57	2	..
Western Union Telegraph	12	Dec. 31 (f)	3.18	6.89	..	54
<i>Traction</i>						
Greyhound Corp.	12	Dec. 31	1.77	1.59	11	..
Twin City Rapid Transit	12	Dec. 31	1.14(g)	2.00	..	43
<i>Systems outside United States</i>						
American & Foreign Power (Pfd.) ..	12	Sept. 30 (c)	7.70	4.51	70	..
International Tel. & Tel. (e)	12	Dec. 31	1.60	0.63	155	..

* Estimated.

- On common stock, unless otherwise indicated following name of company; in some cases, Federal surtax not deducted.
- Report also published for month ending same period.
- Report also published for quarter ending same period.
- Parent company only. The consolidated statement for twelve months ended February 28th showed \$9.31, against \$10.28 last year.
- Excludes Spanish subsidiaries and Postal Tel. & Tel. Co.
- For two months ending February 28th the company reported a net loss of \$1,243,217 compared with net income in 1937 of \$536,134.
- Before surtax \$1.45.



What Others Think

Wanted: A Long-range Federal Power Policy



IT is unfortunate in a way that much of the current controversy over personalities which has surrounded the Tennessee Valley Authority situation has served to obscure more important, more fundamental differences of viewpoints as to policy, not only with respect to TVA, but other Federal power projects as well. Maybe a congressional investigation will dig deep enough to reveal this basic problem in its true perspective, and if so it would probably serve a better public purpose than merely determining who charged whom with what.

It is obvious, for example, that no government-owned utility can be a cost yardstick unless its accounting is done on the same basis as that required of privately owned utilities. Yet it is not done this way. State regulatory bodies require uniform accounting systems of all intra-state privately owned utilities. Federal regulatory bodies require uniform accounting systems of interstate utilities.

But government - owned utilities, whether municipal, state, or Federal, generally keep their books according to their own ideas on the matter. So long as this is the case, talk of yardsticks is wasted breath.

Now this anomaly has appeared in a new form within the circle of governmentally owned utilities. The basis of power cost accounting at Bonneville dam will be different from that at Boulder dam. The government has followed a different rule in allocating to power its proportion of total Bonneville costs. Naturally, this causes uneasiness in the Boulder dam section. As the *San Francisco Chronicle* stated editorially:

This is serious to all users of Boulder dam power, for the cost charged to power at Bonneville is lower than at Boulder. This would not matter particularly if the dispar-

ity were between Boulder and TVA, which are not in the same competitive fields. But Bonneville and Boulder are near enough so their electricity users will be in competition. Boulder power users are in dire alarm over the prospect that their competitors in Bonneville territory will get cheaper electricity. This is not because it is cheaper to make electricity at Bonneville, but because the bookkeeping is not the same in the two projects.

It has been a futile fight to get government-owned utilities under the same accounting system required of privately owned utilities. The promoters of public ownership will not have it. They do not want their projects subjected to exact comparison with the privately owned. They wish to leave things so the use of taxpayers' money can be concealed.

But, as between its own utilities the government ought to play fair with its customers by keeping the books alike in all of them. Boulder power users should not be put at a disadvantage by different bookkeeping at Bonneville.

BUT why should it really be so "futile" as the *Chronicle* seems to concede, to have the Federal power projects play according to the same accounting rules that the government, in its regulatory capacity, lays down for the private electrical industry? Frank F. Fowle, well-known consulting engineer of Chicago and president of the Western Society of Engineers, suggested one answer in a technical paper before the Fuel Engineering Conference held in Atlanta, Ga., last February. He stated his own belief that it is because power from government projects "cannot be put to economical use for years to come if ever." Mr. Fowle added:

Advocates of such undertakings always point to collateral benefits, such as flood control, water supply, navigation, and soil erosion. If these benefits are real, their capital values can be estimated on a scientific basis from known facts, and then deducted from the total cost of the projects. Until this has been done, and as far as known

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it has not been, there is no basis for crediting the total cost of these power projects with any deductions.

Although the waste of public money in constructing uneconomic and misplaced power developments is very serious of itself, perhaps the most serious aspect of these undertakings is the development of surplus power on a scale that seems wholly inexcusable. It cannot be doubted that this surplus will prove irresistible to politicians and radicals who wish to plunge the government into the power business, regardless of all opposition. The inevitable result of competition with regulated private industry which has already satisfied existing markets will be to destroy much of their business and prosperity, promote unemployment and distress, and ultimately ruin thousands of innocent investors.

Let it not be said that engineers failed to come forward with a remedy to safeguard private enterprise and the millions of people dependent on it. The best economic remedy which can now be devised is for the government to suspend the development of power on all of these projects, and in future develop only so much of the potential power as the private utilities can economically absorb and distribute to the power markets of the country. Let the government cooperate with private industry instead of engaging in ruinous competition with it.

A somewhat similar viewpoint was expressed last fall by Alex Dow, president of the Detroit Edison Company, before the Investment Bankers Association of America. Mr. Dow said in part:

I am told that certain government operations are intended to be a yardstick whereby I must measure my possibilities of costs and service. Their accepted costs are not the costs I am required to accept and publish. They omit taxation; they even forget to show certain Federal facilities granted to them out of tax moneys. I am compelled to allocate every chargeable cost to my electric business. They are so free from that requirement that where they have more than one function they charge electric costs to other functions, and in their allocations of investment they favor those functions which are supposed to be a yardstick for me, at the expense of functions which I do not assume and would not be permitted to assume. The allocation of costs of investment in the most notable yardstick operation, between flood prevention, navigation, and production of electric energy, is such as would not get past any straightforward public accountant. I surely am perplexed, when the set-up of the shining example which is set before me is such that no member of your association would permit it to go past as justifying his approval of an offering to investors.

Is there another side to this question? Can the elasticity of not the variation in Federal power cost accounting be defended? Morris L. Cooke, former REA head, gives a plausible explanation in sketching his "Design for a National Power Policy," recently published in *The New Republic*. To Mr. Cooke's way of thinking, the inherent differences in the respective functions and objectives of government, as compared with private enterprise, are clearly the reasons why the respective cost concepts must differ also. And this is true, even though we retain the notion of a Federal yardstick. Mr. Cooke states on this point:

The advantages of public enterprise as a yardstick cannot be realized by attempting to set up a public enterprise in such manner as to duplicate a private enterprise in every detail, and then comparing the two. They are essentially different kinds of institutions, with different objectives. Comparison of the costs of identical component parts of technical operations by a uniform system of cost accounting can indeed be useful; but comparison of the costs of a public enterprise in its entirety with those of a private enterprise in its entirety is neither realistic nor practicable because of the variables involved. For instance, public agencies obtain their money at low rates and almost without exception amortize their investments. The private utilities, by their failure to amortize capital-debt, laid themselves open to the recent collapse of equity values.

It is a recognition of and experiment with the variables that are important. A public enterprise can make experiments and comparisons on many fronts that private enterprise cannot or will not make. It can explore such things as the advantages and disadvantages of mass consumption at low rates, the extent to which electricity can be used advantageously on farms, and the influence on productivity and costs of good wages and superior working conditions. It can explore the part to be played by electricity as the "coordinating agent" in the promotion of a comprehensive conservation program.

It would appear from the foregoing passage that Mr. Cooke does not think of Federal power operations in terms of an immutable yardstick but rather as a pacesetter—an electric rabbit, so to speak, with frankly admitted technical advantages, such as low cost money and by-product status, which will allow it to engage in ever new experiments and policies which the "pack" of utilities operat-

WHAT OTHERS THINK



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ing under orthodox financial policies may imitate if the maneuvers are successful, but which utility companies could never risk on their own initiative.

As for the consistency of conduct as between different Federal projects, Mr. Cooke suggests: (1) a central determination of national power policy and

central administration of conformity to general policy; (2) regional operation and business management and regional application of general policy (including the making of rate schedules) to regional circumstances. While this suggestion is a little too general to fit the specific differences between Boulder dam and Bonneville dam, for example, Mr.

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Cooke, without naming sections, gives us a significant additional thought along the same lines:

While it is essential that national policy be observed, if we allow these considerations to deprive regional authorities of the flexibility necessary to their realistic operation, we fall into the same centralization mania that has made the holding companies a liability to the utility industry. It is perhaps better to have electricity operations directed from Washington than from New York. But that is not the choice. On the other hand, unless the regional agencies have a considerable measure of managerial direction, they will lose the vitality that results from close contact with local conditions.

The transmission area of each particular major generating point, or of a combination of generating points within a natural region, should be considered an individual operating region. The boundaries of such a region should not be exclusively delimited by geographical definition, but should be determined by the relation among physiographic factors, market factors, and the state of the technique of economical transmission of energy, and should be expanded or contracted according to circumstances.

Each region should be administered and managed by a quasi autonomous public agency (an individual, a board, or a commission) authorized to promote and manage and make contracts for the sale of electric energy generated as a by-product of public works in the region, to determine the rate schedule for the region in conformity with recognized national policy, and in general to pursue activities appropriate to the principles and policies hereinbefore discussed.

There should be established a central agency, or an existing agency should be utilized, to formulate general policy; audit the conformity of regional policies, rate schedules, and operations to general policy; and in general serve as an agency to establish general conformity to national policy and coördination among regional agencies, but not to serve as an operating, business, or regional rate-making agency.

MR. Cooke goes on to state that although the possession of power resources by the Federal government has been usually an incident of other and primary purposes, "the revenue from the generation and sale of power may be the critical factor that will pay for a comprehensive coördinated program of conservation and the development of necessary public works." Mr. Cooke would have the electricity produced by multi-

purpose Federal dams transmitted by lines designed to become ultimately part of "an integrated transmission system operated or effectively controlled by the appropriate agency or agencies of government."

However, whatever the instrumentalities—public or private—he would insist that the ultimate direction and effective control must be in public hands. The inherent nature of government and "historic circumstances," he says, "do not permit even momentary consideration of a partnership of equal powers in making appropriate arrangements."

On the question of price criterion, Mr. Cooke gives the following factors involved in the reasonable cost to be taken into consideration by the Federal government "in establishing wholesale rates and in stipulations influencing retail distribution rates":

Rational allocation of the costs of multiple-purpose projects.

Amortization of the allocated cost of construction during the life of the property.

Interest.

Taxes, as under the TVA, where a percentage of gross is paid to the states.

Cost of maintenance.

Finally, Mr. Cooke insists that a power policy for the United States must recognize that the government in the lawful exercise of its rights as a proprietor of property remains always a *government* essentially charged with responsibility for public welfare. In the use of vast resources of water power and in the disposal of the electrical energy they produce, considerations of policy, he says, "run far beyond mere proprietorship and must embrace the public functions for which governments exist."

Mr. Cooke, who may be recalled as a champion of the "little waters" doctrine of coördinated flood control and power development in the hinterlands, gives evidence that he has not abandoned his theories. "We must learn to control waters as they fall on the land from the clouds and as they flow over our fields and in our streams." In the handling of these waters both upstream and downstream by methods we know now and by others yet to be devised, he believes that

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the development and expenditures of hydroelectric power will be on a scale quite beyond the outlook of present-day financial accounting "but fully justified from the standpoint of social accounting."

IN view of the prevailing controversy over the TVA directorship, an editorial comparison by *The New Republic* of the views of Mr. Cooke and Dr. A. E. Morgan, recently deposed as chairman of the TVA by President Roosevelt, is of timely interest. The editorial passage was in part as follows:

As recently as eighteen months ago, Dr. Morgan was asking equal representation between the government and private interests in formulation of TVA power policy, which would be unfair to the public interest. Dr. Morgan was willing to have private power companies sold to government bodies at a price that would permit "promoters' profits"; he has asked that the compensation to be paid be submitted to arbitration, and has approved of "severance damages" supposedly to cover the loss in cutting off one part of the plant from the remainder. Mr. Cooke opposes all these suggestions. In his opinion, Dr. Morgan is needlessly concerned lest "hidden subsidies" be given to public power plants.

The TVA chairman admires the state utility commissions, whose record Mr. Cooke knows to be bad. Dr. Morgan's suggestion that the utilities should buy power from the government and resell it at a rate to be fixed jointly by the Federal government and the utilities is illegal, Mr. Cooke points out, since the Federal government cannot interfere in intrastate prices for electricity. Finally, Mr. Cooke draws an unfavorable contrast between Dr. Morgan's actions and those of the two other members of the board, who have fought against the unfair tactics of the private power interests, have helped large cities in the TVA region to get their own service, and have cooperated fully with the Rural Electrification Administration. Reluctantly, we are forced to agree that an investigation of the TVA is now desirable.

But will such hydroelectric development continue to be economical "by methods we know now"? Social implications perhaps more far-reaching than important economically may lie behind the recent announcement by the General Motors Corporation of its entry into the Diesel engine field. Describing the new "vest pocket" Diesel generator, *The New York Times* stated editorially:

It is estimated that with one of the "packaged power" units, which will be assembled at the Cleveland plant, the small factory or large farm will be able to secure electricity—no matter how far from the source of large commercial power supply—for as little as 2 cents a kilowatt hour, at the present price of Diesel fuel. What this might mean in independence of utility rate structures and in decentralization of industry stimulates the imagination. Already the big Diesel-electric units for railroad use, manufacture of which will be expanded at the La Grange (Ill.) plant of the corporation, have shown such operating economies that it is held if they were to supplant steam for switching engines alone, a saving of \$52,000,000 annually would be effected for the country's railroads and the new equipment paid for in five years.

How could this affect the grandiose schemes for public power transmission and distribution? The Portland *Oregonian* editorially raises this interesting question with specific relation to the distribution problem of Bonneville dam. It stated:

The public utility district is founded on present methods of generating, transmitting, and distributing current. Yet it begins without physical equipment. Its sole resource is the power to tax. The property not only of prospective users is made to underwrite the distributing project, but the property of others, such as railroads, timberland owners, private electric utilities, is made to underwrite the cost of "cheap power."

Until it buys or builds a distributing system the public utility district has nothing on which to hook Bonneville or Diesel power. If "package power" is going to make distributing systems unnecessary, public utility districts might as well fold up. You can hardly expect the taxpayers to buy or underwrite the purchase of a lot of package-power plants to be distributed among farm and city dwellers.

Finally, one wonders what the widespread use of small "vest pocket" generators would do to the elaborate system of central station lines now being constructed in rural areas with REA funds. It may be that the Diesel-packaged power units will not become nearly so revolutionary a factor as here suggested, but it is just one piece of evidence that has recently bobbed up to show that the Federal government is undertaking serious responsibilities with the taxpayers' money when it embarks on a pretentious

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program of power production and distribution. Management has made errors in judgment before but capital has always paid for them. When the government makes similar errors, however, it can expect to hear from the taxpayer in no uncertain terms. All of which would indicate that what the Federal power program advisers need right now perhaps more than anything else is a long-range, comprehensive, uniform power policy, but there does not seem to be much progress in immediate prospect.

—F. X. W.

BONNEVILLE TO UNDERCUT BOULDER. Editorial. *San Francisco Chronicle*. March 10, 1938.

NATION'S POWER SUPPLY. Paper presented by Frank F. Fowle at Fuel Engineering Conference, Atlanta, Ga. February 8, 1938.

SOME PUZZLES OF A PUBLIC UTILITY MAN. Address by Alex Dow before Public Utilities Forum at the Twenty-sixth Annual Convention of the Investment Bankers Association of America, White Sulphur Springs, W. Va. November 4, 1937.

DESIGN FOR NATIONAL POWER POLICY. By Morris L. Cooke. *The New Republic*. March 2, 1938.

TROUBLE IN THE TVA. Editorial. *The New Republic*. March 16, 1938.

DIESELS AND INDUSTRY. Editorial. *The New York Times*. January 24, 1938.

PACKAGE POWER. Editorial. *The Oregonian*. February 28, 1938.

Facsimile Broadcasting Enters the Communications Picture

AT the recent annual meeting of the National Association of Broadcasters at the Willard Hotel in Washington, there was on display one of the new facsimile machines. It is a simple and relatively inexpensive mechanism which attracted considerable attention from the delegates and convention guests, including FCC Chairman McNinch. Utilizing a light-and-shadow sensitivity process somewhat similar to the half-tone engraving method long in use, this machine, not much bigger than a normal typewriter or adding machine (which it more nearly resembles), will reproduce in your own home with neither ink nor type, "copy" broadcast from a central station at the rate of an inch a minute. While this seems slow, it can and doubtless will be speeded up.

The detailed mechanics of the new facsimile process vary according to the several makes and models now in the field. Generally speaking, a little "scanning bulb" moves horizontally across the copy page at the broadcasting station and transmits the surface arrangement via electrical waves to the home set where sensitive bulbs pick up the signals and reconvert them into impulses controlling

a pen-like attachment moving horizontally across a page of ordinary carbon-backed paper. The effect is fuzzy but quite legible if the "copy" type is not too fine. Much further development is doubtless in order, but on the whole it is safe to say the facsimile radio transmission has definitely arrived. It is no longer an experiment.

Now what will all this mean to the communications industries of America, especially with respect to their regulatory aspects? Miss Ruth Brindze, noted advocate of consumers' rights, raised some provoking questions in this field in a recent article in *The Nation*. She stated:

The technical problems are far simpler than the social and economic ones, for if the development of facsimile broadcasting continues, as there is every reason to believe that it will, city folks as well as those who live on the farms can be supplied with newspapers and other reading material by radio. The Radio Corporation's facsimile receiver is already equipped with a blade for cutting the printed rolls of paper into convenient page sizes. With the addition of a simple binding device, books and magazines may be produced by the little radio printing machine. The possibilities are unlimited. As events take place, as history is made, the facsimile

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Knoxville Journal

SIMPLE—WITH HIS FLORIDA FISHING EXPERIENCE

machines will produce directly in the home a contemporaneous printed record. No newspapers will be able to compete. Facsimile will be faster, more convenient, cheaper. At the trivial cost of the rolls of paper and the electric current, the audience will be supplied with more printed matter than it can read. Every day's paper may be as bulky as the *Sunday Times*; magazines and books

will achieve a circulation of a hundred million.

Even now, before large-scale production has been begun, it is estimated that a facsimile receiving machine can be profitably sold for less than \$40. Eventually . . . a visual recording device will be included in the same cabinet with the apparatus for receiving oral broadcasts. And everyone will

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have one, for perhaps the only way of getting a newspaper and other printed matter will be by radio. Television has not yet been perfected; the audience must await the solution of technical problems before movies can be produced in the home. But facsimile is ready today.

Miss Brindze went on to state that both the FCC and the promoters of facsimile devices are aware of the potentialities of the machine, but are inclined to soft-pedal its immediate possibility as a rival of existing newspaper service by suggesting that it should be a "supplemental" service. She hinted that the existing newspaper industry may try to obtain control of facsimile for obvious reasons and added:

The present policy of the Federal Communications Commission on facsimile broadcasting is one of cautious planlessness. Licenses are being issued for experimental purposes and on a temporary basis. This relieves the commission of the necessity of determining immediately who shall control the machines so that their operation will be "in the public interest." But temporary privileges have a way of achieving permanency in the radio world. Eight licenses have already been issued—to Stations WGN, Chicago; WSM, Nashville; KSD, St. Louis; WOR, Newark; WHO, Des Moines; WGH, Newport News; KFBK, Sacramento; and KMJ, Fresno; and a raft of other applications have been filed. Stations which have been willing to spend a modest fortune on facsimile experiments will have a strong argument for being permitted to continue visual broadcasting when the service proves successful.

Facsimile offers interesting possibilities of profit to the radio stations. It can be transmitted on the regular wave lengths and by means of existing broadcasting equipment. Moreover, instead of remaining idle for six or more hours out of every twenty-four, the machines can be kept busy transmitting printed news and paid advertising. The licenses so far issued permit the stations to use their wave lengths for visual service only between midnight and six in the morning, but eventually visual as well as oral broadcasts may be permitted at any hour.

As evidence that Miss Brindze is correct in her suggestion that members of the FCC are alive to the social and technological implication in facsimile

broadcasting, note the following passage from an otherwise polite and noncommittal speech by Commander T. A. M. Craven, newest member of the FCC, given at the very Washington assembly of the National Association of Broadcasters where the facsimile device was displayed. Said Commander Craven:

Today, in all industries there are many problems involving labor, and all thinking people are of the opinion that with the modern technological trends, it is essential that the nation ascertain methods to secure employment for people who have been displaced as a result of the applications of new inventions. Radio itself was a new invention which caused a net increase of employment and upon which there has been founded a vast new industry. Hence, we should not forget that even in radio there is a responsibility upon those engaged in the business to so plan future technological development that consideration will be given to the social trends of modern times. Since radio is such a young art, it would appear that there is a great opportunity for the industry to contribute toward the public welfare in establishing new phases of the industry which will in part take up the slack of unemployment caused by other modern technological trends. To do this, the industry must plan on tremendously broad lines and utilize vision and economic planning of a character which has hitherto not been attempted by many other industries. Here is an opportunity which requires, however, greater cooperative effort on the part of individuals than hitherto thought possible. I am sure you must realize that I am referring to such new developments as facsimile, television, and ultra short wave broadcasting, and the consideration of the effect of these new developments upon the existing structure.

There is much food for thought here not only for the radio and newspaper interests directly affected but also for the telegraph and telephone industries which participate indirectly in the function of our existing national news-communication services.

NEXT—THE RADIO NEWSPAPER. By Ruth Brindze. *The Nation*. February 5, 1938.

ADDRESS of Commissioner T. A. M. Craven before the Sixteenth Annual Convention, National Association of Broadcasters, Washington, D. C. February 15, 1938.

The March of Events

Supreme Court Dismisses Appeal

IN a per curiam opinion, the U. S. Supreme Court on April 25th dismissed the appeal of the Tennessee Electric Power Company against a \$4,300,000 PWA loan and grant for a municipal power system at Chattanooga. The court's action was based on its decisions of last January rejecting challenges by the Duke Power Company and Alabama Power Company of the government's policy of financial support to municipal electric plants in competition with private enterprise.

Dismissal of the Tennessee Electric suit was hailed as a victory for Secretary of the Interior Ickes, who had already won against the utility in the District of Columbia Appellate Court. The 6-line finding of the Supreme Court merely cited the Duke and Alabama Power Company decisions as its precedents.

House Votes Dam Fund

THE House on April 25th reversed two earlier votes and approved a \$2,613,000 appropriation to start construction on the Tennessee Valley Authority's Gilbertsville dam in Kentucky. The item was in the conference report on the Independent Offices Bill. The vote was 159 to 152.

The Gilbertsville dam item to start a project estimated to cost about \$112,000,000 was first rejected by a House appropriations subcommittee and then voted down on the floor, this rejection being confirmed when the House conferees asked for instructions several days before the item was voted on.

Bonneville Rates Fixed

ADMINISTRATOR J. D. Ross on April 20th formally announced that Bonneville power would be sold on a basis new to the United States, but tried successfully in Ontario—the kilowatt year.

Rates for a kilowatt year to the public utility district or private utility which purchases Bonneville power—the project will not retail direct to consumers were expected to be announced by the Federal Power Commission at Washington.

Mr. Ross said that the kilowatt year sales unit is based entirely on the cost of produc-



ing power and is an attempt to get away from present practices of selling power "from the old scarcity standpoint." He said:

"Consumers now pay for millions of kilowatt hours of electricity that they do not use. Immense quantities of water power are wasted over the dam because people will not pay exorbitantly high rates."

A kilowatt year is 1,000 watts furnished day and night for twelve months, or 8,760 kilowatt hours of electricity. By buying electricity on that basis, at cost, the distributing city, company, or power district will be inspired to encourage customers by low rates to use all the power needed, rather than to limit their use of the abundant flow of energy.

FPC Sets Hearings

THE Federal Power Commission recently announced that it had ordered three hearings held on interlocking directorate applications involving fifty-eight officials in three major utility holding company systems. Each of the officials has been ordered to make further showing that neither public nor private interests will be adversely affected by reason of his holding interlocking positions. Each is holding such positions at present through conditional authorization previously granted by the commission.

Hearing on the applications of fourteen officials in the American Water Works & Electric Company system has been set for May 20th. The interlocking directorate applications of twenty-four officials in the Associated Gas & Electric System have been set for hearing May 27th, and the applications of twenty officials in the Consolidated Gas, Electric Light & Power Company of Baltimore system have been set for hearing June 3rd.

Power Pacts Altered

TWO modified contracts dealing with the use of Boulder dam power supply by the Los Angeles Bureau of Light and Power and the Metropolitan Water District were approved tentatively last month in Washington by Secretary of the Interior Ickes.

One contract dealt with the deferring of use of 36 per cent of the power plant output by the water district until June 1, 1940. The other concerned the construction of a third circuit to Boulder dam to supply the Bureau of Light and Power with an additional block

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of energy which would be needed by next year.

Announcement that the contracts had been submitted by a solicitor to the Secretary of the Interior and given tentative approval was made in Washington by Northcutt Ely, attorney for the power bureau.

It also was announced that copies of the contracts had been dispatched to the seven governors and members of Congress of the seven Colorado basin states with a request for comment, the deadline for suggested changes or objections being set for May 9th.

Originally the district had contracted to use the large amount of power in its five pumping plants which will boost the water over mountains from its intake at Parker dam. By this contract the district would have been forced to accept and begin paying for the power on June 1st of this year. Through the new contract the district will not receive the power until June 1, 1940, at which time it is expected that the aqueduct will be completed and ready to use the energy.

Attorney Ely said that a stipulation had been written into the contract providing that Arizona, Nevada, and other interests would be reimbursed for the amounts they would have received if the original contract had been held in force.

Bridges Criticizes Garner over TVA

Vice President Garner cleared the way on April 19th for launching the \$50,000 congressional inquiry into the Tennessee Valley Authority by appointing Senator James J. Davis, Republican of Pennsylvania, as the final member of the joint committee.

The appointment brought a sharp attack from Senator H. Styles Bridges, Republican of New Hampshire, and a leader in the fight for an investigation of the TVA. He contended that "the Roosevelt administration" had kept him from being a member of the joint congressional investigating committee.

He asserted that under Senate custom Senators who have done "the initial spade work" for and have procured passage of investigation resolutions have been named to inquiry committees. Senator Bridges added:

"Precedent and courtesy in the TVA investigation have been thrown overboard. I hope the investigation will be fair, impartial, and searching. Had I been named I would have leaned over backwards in maintaining that attitude. This is not a political investigation in any sense of the word. The TVA is not the personal property of the New Deal or of the Republican party, but of the American people."

The joint committee has formally elected Senator Donahey chairman, and Representative Mead vice chairman.

Puerto Rico Project Opposed

CARROLL G. Walter, New York counsel for the Puerto Rico Railway, Light and Power Company, a Canadian corporation, on April 19th began the presentation of testimony in an injunction suit before U. S. District Judge Robert A. Cooper whereby the utility company hopes to prevent the extension into San Juan of government power lines to serve the Federal and Insular government agencies.

The power line extension came as one of the first of the New Deal activities for island rehabilitation, and both the Insular and Federal authorities contended that it did not violate the company's franchise. They asserted that it carried out the mandate of the Insular legislature in the form of a concurrent resolution passed in March, 1935, ordering the government's hydroelectric service to make an extension into the San Juan district.

The company contended that although its franchise was not exclusive, an agreement of 1909, when the Insular government embarked on its electric program, stipulated that the government, in lieu of the company's surrender of certain water sources, would not compete in the company's territory.

Arizona

Rate Cuts Approved

THE state corporation commission recently approved voluntary rate reductions in Phoenix for large users of electricity and in Gila Bend for all users of light and power.

The Central Arizona Light and Power Company filed a new rate for the benefit of large consumers, providing a charge of \$140 for the first 30 kilowatts of power or less of demand required by large firms and hotels to operate all equipment. The \$140 charge represents the minimum. For the next 170 kilowatts demanded, the price is \$2 per kilowatt;

and for all additional kilowatts demanded the rate of \$1.50 per kilowatt.

The rate for use above the minimum is one and one-tenths cents per kilowatt hour for the first 175,000 kilowatt hours, and 8 mills per kilowatt hour for all additional.

The demand is based on a kilowatt of power and the use on kilowatt hour.

The new Gila Bend rates applicable to residences and business firms places a \$3 minimum, instead of \$3.50, with charges for use of 50 kilowatt hours reduced from \$4.25 to \$3.75; 100 kilowatt hours, cut from \$7.50 to \$5.95, and 200 kilowatts from \$12.75 to \$8.95.

THE MARCH OF EVENTS

Arkansas

Votes to Acquire Gas System

THE Little Rock city council voted unanimously to proceed with its plan to acquire the distribution system of the Arkansas Louisiana Gas Company in that city for future municipal operation in a special meeting on April 21st.

A resolution authorizing Mayor Overman, with approval of the council's utility committee and the council, to take such steps as were necessary to acquire the distribution system by "purchase, condemnation, or in any other lawful manner" was adopted.

The proposal to acquire the distribution system was offered to the city council on April

18th by Mayor Overman and the utility committee. The original resolution was discarded and a substitute adopted. The only change was that the mayor was authorized to take necessary steps upon approval of the utility committee and the council. The original resolution provided that the mayor and committee could execute contracts and fix fees subject to council approval.

Thomas Fitzhugh, chairman of the state utilities commission, explained that the city might purchase the gas distributing properties directly from the holding companies, or failing in that could appeal to the commission to appraise the properties for the purpose of fixing a valuation.

Florida

Utility Winner

AN alternative writ of mandamus obtained recently by the city of Miami, under which it was sought to force the Florida Power & Light Company to submit its books and records to examination by Thomas E. Grady, indicted city rate and traffic official, for investigation into alleged discriminatory rates, was quashed last month and the entire proceeding dismissed in an order signed by Circuit Judge H. F. Atkinson.

The judge held that the city has the power under its charter to regulate public utilities and that the franchise ordinance allows the city to inspect the records at reasonable times,

but that "it does not appear from the petition and writ that any attempt has been made to regulate the operations of the Florida Power & Light Company prohibiting unjust discrimination in service or rates."

In the absence of such an ordinance, the court held, the city's demand upon the company to permit its books and records to be inspected by Grady or any other representative of the city was "premature and therefore unreasonable."

Grady, on April 23rd, appealed directly to the state supreme court for his freedom. His attorneys told the court information filed April 15th against Grady charged no offense under Florida law.

Idaho

Rejects Bonneville Power

FORMER Governor C. Ben Ross, in an interview last month, said that the "state of Idaho doesn't need Bonneville dam power." He added that transmission of Bonneville

power to Idaho was unnecessary. He said:

"We have many Snake river sites where we can develop all the power we will ever need. We can build our own power plants for what it would cost to bring Bonneville power into southern Idaho."

Kentucky

Utility Sues to Force Tax Levy

A SUIT was filed in Federal district court on April 18th by the Kentucky-West Virginia Utilities Company, owner of the electric power and water franchises at Barbourville, for \$12,476.61.

A judgment for \$6,610.90, representing the city's light and water bill for the period from

June 1, 1936, to March 1, 1938; a mandamus to force the city officials to levy sufficient taxes to pay a judgment of \$5,797.71 obtained in Federal court at Lexington September 14, 1936, and a judgment for \$68 in costs were asked in the company's bill of complaint.

Officials of Barbourville instituted the previous suit. It attacked the franchises under which the utility company operated. The

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court ruled the franchise valid and, on a counterclaim entered by the utility concern, granted the company the \$5,797.71 judgment which has not been paid.

An effort by the corporation to levy on the city's property failed when the United States Marshal could not find any property on which to execute an attachment.

Michigan

Gas Dispute Faces Court

RECOMMENDATION that the city of Detroit take the gas rate controversy before the state supreme court, provided the state public utilities commission followed an opinion of Attorney General Raymond W. Starr, was made on April 22nd to the city council by the corporation counsel.

Starr had previously stated that the state commission should assume jurisdiction in Prosecutor McCrea's petition for an investigation of Detroit City Gas Company rates.

James H. Lee, of the corporation counsel's staff, told the council that, according to Starr, the commission would not have jurisdiction in the case if a contract existed between the city and the company. The city contended that the contract did not exist, and Lee said that the city should control its own utilities, with objectors to rates having recourse to the city council.

With regard to the so-called "Detroit plan," Lee said the only objection to it had come from McCrea, who "has spent thousands of dollars of the taxpayers' money on a grand jury investigation of the gas situation." Although the investigation was completed some time ago, there had been no report, he said.

Three members of the council asserted, upon learning of Starr's decision, that if the utilities commission followed Starr's advice, they would ask the corporation counsel to appeal to the state supreme court. The gas company was expected to take similar action if the commission sought to take over jurisdiction in the case.

Starr held that the commission had power to fix the rates but said the commission had no authority to investigate McCrea's charges of irregularities, corruption, and fraud on the part of unnamed city officials.

Gas Hearing Scheduled

THE state public utilities commission recently set May 12th as the tentative date to hear the application of the Washtenaw Gas Company's petition for the right to appeal from a commission order that denied it permission to supply its customers with natural gas imported from Texas.

The appeal was demanded by the Washtenaw Gas Company and the Michigan Gas Transportation Company, which would tap a pipe line that now supplies Texas gas to Detroit.

The state commission has ruled that the

Washtenaw Gas Company should explore Michigan markets before turning to other states for its fuel supply.

Municipal Utilities Escape Tax

EFFORTS of the state board of tax administration to impose the 3 per cent use tax on sales of municipally owned public utilities were abandoned last month. Attorney General Raymond W. Starr informed the board he found no authority for the collection of this tax. The state supreme court, in a Wyandotte test case, already had prevented the board from collection of the 3 per cent sales tax from the same utilities.

Draper Allen, state sales tax administrator, had contended the new use tax was a consumer tax and that therefore it was collectible on sales of electricity, steam, gas, or water by municipal utilities. Starr quoted the Wyandotte case, which held municipalities are not mentioned in the Sales Tax Act. He said the same conclusion had been arrived at with respect to the Use Tax Act.

Utility Values Raised

ASSESSMENTS on Michigan's railroads and telephone and telegraph companies were recently increased \$16,000,000, John N. Fegan, state tax commissioner, has revealed.

Tentative assessments for railroads totaled \$220,645,000 as compared to a final 1937 assessment of \$214,305,000. Tentative assessments for telephone and telegraph companies were \$128,391,100, as compared to a final figure of \$118,760,100 last year. The final 1938 assessments, it was said, would be fixed by May 10th.

A tentative increase of \$7,400,000 in the Michigan Bell Telephone Company assessment was the largest recorded. Tax commission records were produced to show that the company last year had a net operating income of \$10,208,591 and that it added \$7,344,000 to its plant in spite of a depreciation figure of \$6,589,133.

For the Western Union Telegraph Company, the tentative assessment was placed at \$4,000,000, an increase of \$580,000. A \$6,250,000 assessment for the American Telephone and Telegraph Company represented an increase of \$750,000.

Taxes collected from public utilities are based on the average tax rate in Michigan. This average is \$26.18 per \$1,000, as compared to \$25.57 last year.

Mississippi

City's Right to Use TVA Power Upheld

THE U. S. Fifth Circuit Court of Appeals on April 15th held that the Mississippi Power Company could not legally prevent Aberdeen from using public funds to construct an electric distribution system using power from the Tennessee Valley Authority. The power company sought in November, 1935, to prevent Aberdeen from securing money from the Public Works Administra-

tion to construct a plant to connect with TVA power lines. The case was dismissed by Judge Allen Cox in the lower court.

The power company contended it secured a franchise from the city when it purchased the city power plant in 1926 and that erection of another plant would result in unfair competition. The court held that in the franchise there "is no covenant that the city will never again construct an electric distribution system. Exclusive franchises are forbidden in Mississippi."

Nebraska

Authority Challenged

REPRESENTATIVES of nine private power companies operating in Nebraska last month questioned the right of the state railway commission's attempt to establish a uniform system of accounts for them without specific legislative authority.

They pointed out that although the constitution sets out such powers in general, the legislature to date had not specified such action. As a result, they asked the matter be held in abeyance until and if the legislature should provide that authority.

The utilities also challenged the need for uniform accounts, asserting they questioned what the commission would do with the information after it received it. To make such reports, they said, would necessitate considerable additional expense, in view of the fact the material would have to be submitted on a daily basis.

The proposed accounting system would be patterned after that now required by the Federal Power Commission. The power company representatives, however, asserted they were challenging the Federal agency's authority in that connection and for that reason also wanted the matter deferred as pertaining to the state commission.

Commissioner Good presided at the hearing. Commissioner Maupin reiterated his position that the uniform accounting system should be extended to embrace municipalities and public power districts.

Reject Rate Cut Offer

THE North Platte city council rejected an offer of the Northwestern Public Service Company last month for a 7 to 10 per cent electric rate reduction, and decided to make its own survey to determine a "fair and equitable" rate.

The council voted to employ Robert Fulton, Lincoln utility engineer, to survey the power rate structure in North Platte. He is to be

paid not more than \$1,500 for his work.

The rate dispute arose after the council passed a resolution calling for a 40 per cent reduction. The company averred any cut at all would be out of the question, but later submitted its offer to decrease residential electric rates 7 per cent and commercial rates 10 per cent.

Councilmen explained they were motivated by a desire to get lower rates before the company is sold to the state's public power districts, which are negotiating for the purchase of the Northwestern firm and other private power companies.

Gas Contract Renewed

THE board of the metropolitan utilities district which supplies Omaha with water and gas, voted recently to renew its contract with the Northern Natural Gas Company, under which the company supplies the district with 40 per cent or more of the city's gas requirements, for at least two years. The contract will continue until either party gives six months' notice.

Signs Power Contract

NEBRASKA'S "little TVA" hailed signing of contracts last month for purchase of Hastings municipal power from the Tri-County Public Power and Irrigation District as the first definite step in the public district's plans for an integrated statewide power grid system.

The city council approved the contracts and steps were taken to complete connection of city and Tri-County lines. Pending completion of Tri-County power plans, current will be supplied from plants of the Loup river district at Columbus, with which Tri-County has an interconnection agreement.

Under the agreement, Hastings will purchase a minimum of 3,000,000 kilowatt hours annually, on a sliding scale which will average around 6 mills per kilowatt hour.

North Carolina

FPC Ruling Attacked

THE U. S. Circuit Court of Appeals at Richmond, Va., heard arguments last month on the appeal of the Carolina Aluminum Company for a license to construct a hydroelectric plant on the Yadkin river near Tuckertown, N. C.

The Federal Power Commission, in support of its refusal to grant the license and to grant a review of the case, contended the plant would cause "serious fluctuations" in the Pee Dee river in South Carolina. The company, in arguing for permission to erect a 1,320-foot long dam, contended the project

would not affect the navigability of the Pee Dee river and that the Yadkin river, which flows into the Pee Dee, is not navigable.

The case was appealed after the FPC last November refused to issue a license for the project and in December denied an application for a rehearing. The commission contended its action should be sustained because the applicant presented no new matter in seeking a rehearing, and granting or denying of the application was within "the sound discretion of the commission." The FPC said it found the project would affect the interests of interstate commerce and that the finding was supported by "substantial evidence."

Ohio

Phone Rate Case Settled

LONG-awaited settlement of the 14-year-old Ohio Bell Telephone Company statewide rate case was approved by the state utilities commission on April 26th providing for refunds totaling \$7,225,000 to telephone subscribers. Payment of refunds would begin within ninety days under the state commission's order and would be completed as expeditiously as possible. Columbus subscribers will receive \$1,434,441 in refunds, the largest of any city involved in the rate litigation.

Randolph Eide, president of the telephone company, in a statement following the decision of the commission, said the company did not concede that its rates were excessive in the years covered by the litigation but had accepted a compromise because he and his associates believed that "the best interests of the public, and, I hope, of the company will

be served by bringing this matter to an end."

PWA Clears Way for Plant

THE Public Works Administration recently cleared the way for final action on a loan and grant of \$1,515,000 to Sandusky for construction of a municipal power plant.

A conference held in Washington last month between city and PWA officials evolved a plan under which the city commission would authorize issuance of \$17,500 in bonds for sale to PWA to provide money with which to prepare specifications for the project.

Upon approval of the plan by the commission and the PWA legal counsel, the city would submit to the voters in the November general election a \$1,085,000 bond issue to float a PWA loan for the project. The grant would total \$430,000.

Oklahoma

Utility Valuation Hiked

THE assessed valuation of the Oklahoma Gas and Electric Company was increased more than \$5,000,000 over the return made by the company in the schedule approved April 11th by the state board of equalization.

The board fixed the valuation at \$25,015,000 against \$24,365,000 last year and the company return of \$19,865,510. Money and credit of the company were valued at \$898,845.

Valuation of the Oklahoma Power and Water Company, Sand Springs, was fixed at \$2,580,000.

Oregon

Rate Cut Announced

A REDUCTION of approximately \$100,000 annually in the electric rates of the Idaho
MAY 12, 1938

Power Company, of which \$10,000 applies to Oregon customers, was announced recently by N. G. Wallace, state utility commissioner.

Wallace said the reduction chiefly benefits

THE MARCH OF EVENTS

residential users of electricity in the lower consumption brackets. It includes a 10 per cent decrease in minimum bills for lighting and refrigeration, and reductions also in minimum bills for electricity for electric cooking and for complete residential electric service, including water heating.

Two rates, one for all lighting, refrigeration and cooking service, and one for complete residential service, will replace four separate rates formerly in effect for the four services.

Election Leaves Muddle

WHETHER or not the state hydroelectric commission has authority to create people's utility districts, embracing only those sections of the proposed Northwest Bonneville district which cast favorable votes for the proposal, was a legal question, Charles E. Stricklin, secretary of the commission, declared recently.

Stricklin asserted this question probably would be referred to the attorney general.

Pennsylvania

Utility's Motion Dismissed

THE West Penn Power Company, one of the last big electric companies to be brought into the state public utility commission's statewide rate slashing campaign, on April 21st challenged the commission's right to take testimony building up a foundation for imposition of temporary rates.

Before the company's motion to dismiss the temporary rate part of the case was overruled, opposing counsel and Commissioner Thomas C. Buchanan engaged in verbal legal duel which ranged over the entire problem of utility regulation. The debate started, it was said, when Attorney Stoddard M. Stevens, Jr., New York counsel for West Penn, moved dismissal of the temporary rate portion of the proceedings, challenging the commission's right to proceed under this section of the law.

West Penn, for the last several years, has maintained one of the lowest average electric rates in the state. Tariffs have been reduced three times since 1935, effecting a total annual saving of more than \$2,000,000.

Seeks Natural Gas

OVER the protests of the Philadelphia Electric Company, Eastern Bituminous Coal Association, Western Pennsylvania Coal Association, and the Pennsylvania Railroad, the Lukens Steel Company, of Coatesville, last month asked the state public utility commission for permission to hook up with the natural gas lines of the Manufacturers Light and Heat Company.

Although the natural gas lines are 3 miles away, the Lukens Company, which started business in 1810, claims it will save \$250,000 annually through the change. Unless the commission authorizes the Coatesville plant to use natural gas, it will be forced to close down because of high fuel and operating costs, it was pointed out.

No sections of Pennsylvania would be affected by the change, according to Robert W. Woolcott, president of the company, who said the Lukens Company is using gas coal from West Virginia and fuel oil from out of the state.

Tennessee

Must Furnish Information

THE state utilities commission called on the Kentucky-Tennessee Light and Power Company recently to provide information concerning payments to its parent holding company and other affiliates. The order was issued at the hearing in which the company was before the commission to show cause why its rates should not be reduced.

On motion of commission counsel, the company was instructed to furnish "full information" regarding payment to the Associated Gas and Electric Company, its parent holding company, and other affiliates.

The Kentucky-Tennessee Company was also asked by the state commission to supply complete figures on expenditures in its fight, along with seventeen other companies, against the TVA.

Texas

State Commission Wins

THE way was believed cleared at least temporarily last month for the state rail-

road commission to proceed with its retail gas rate reduction efforts by a decision and gas company concessions in district court.

The action came at the end of a hearing on

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litigation which grew out of a controversy between gas companies and the state commission over rate reduction activities at El Paso and Trenton.

The Community Natural and Texas Cities Gas companies, distributing concerns affiliated with the Lone Star Company, promised that

for the present and under protest they would permit the commission to examine their properties for original rate-making purposes.

The important question of whether the commission can continue to exercise concurrent original jurisdiction with cities in establishment of rates was not decided.

Virginia

Injunction Petition Dismissed

THE petition of the Virginia Public Service Company for an injunction against the state corporation commission was dismissed on April 18th because the state commission already had dissolved orders the petition sought to have dismissed.

Judge Robert N. Pollard, in the U. S. District Court, entered the order which was signed also by Circuit Judge Morris A. Soper and District Judge Luther B. Way. Judge Pollard earlier had granted a temporary restraining order.

The petition was dismissed "without prejudice" and the state corporation commission prepared to proceed with its investigation of the affairs of the power company along dif-

ferent lines. Its order had sought to retain Alexander Speer in office as president, but Judge Pollard's earlier order had allowed the directors to meet and replace Mr. Speer. When this was done the commission vacated its earlier orders, and the hearing before the three-judge court, which was to have considered the application for a permanent injunction, was abandoned.

In a proceeding instituted on April 20th, the Commonwealth of Virginia asked the state corporation commission to prevent the Virginia Public Service Company, a unit in the Associated Gas & Electric system, from paying to a holding company certain charges for services and from paying any dividend on its common stock pending an investigation of charges made by the state.

Wisconsin

Clarifies Extension Order

THE state public service commission recently interpreted its general order on electric line construction, to simplify private utility construction in rural areas near municipal plants.

Many municipal plants have short lines running into rural areas near by, and although planning no further extension into the farm areas, were said to dislike giving up the territory.

To permit private utilities to extend promptly in such regions, the state commission said that the filing of a statement by a private utility of an agreement with a municipal plant, corroborated by a letter from the municipal plant, will automatically exempt the private utility from having to get commission approval for such construction.

operating in Akan, Dayton, and Richwood towns, Richland county.

In answer to an inquiry from the Daleyville Telephone Company, Mt. Horeb, the state commission said a company can levy an assessment of \$5 a share to enable the company to continue operations, if the company is a corporation and if its by-laws do not prevent assessments.

Company Files Exceptions

ATTORNEYS for the Wisconsin Telephone Company on April 15th filed with the National Labor Relations Board in Washington 38 exceptions to the findings, conclusions, and recommendations of Examiner James C. Batten who held the utility guilty of unfair labor practices in a report filed April 6th.

Batten's findings were attacked in 28 of the exceptions as "not established or supported by the evidence." The attorneys took exception to his conclusions and recommendations on the ground that they were "contrary to law, and not supported or justified by the evidence."

The intermediate report found the concern guilty of dominating an independent union of telephone operators in the company's exchanges.

Commission Authorization Not Needed

PRIVATE owners of a telephone company may form a corporation and transfer their property to it without state public service commission authorization, a recent ruling by the commission stated.

The ruling was in answer to an inquiry about the Five Points Telephone Company

MAY 12, 1938

The Latest Utility Rulings

Dividend Payments from Surplus Account of Holding Company



THE Securities and Exchange Commission exercised its power under § 12(c) of the Public Utility Holding Company Act to restrain the payment of dividends by a public utility holding company. The commission by rule had prohibited declaration or payment of dividends out of capital or unearned surplus, but it was said that this did not exhaust the power vested in the commission and it was conceivable that under certain circumstances the commission might prohibit the payment of dividends out of earned surplus by order, provided that the prescribed statutory standards existed.

The commission, in determining that no common stock dividends should be approved and that preferred stock dividends should be approved only upon condition that the surplus be restored by the first earnings accumulated, considered among other factors the fact that the original surplus account upon the organization of the company might be questioned. It was believed by the commission that this account reflected revaluation write-ups and "other questionable accounting items." The commission said it could be argued that the opening entries placed upon the books of the new

company organized in 1926 exceeded the authorization of the board of directors. The commission did not pass upon these controversial questions, but it considered their existence as a matter which might be taken into account in determining whether and to what extent dividends might be permitted.

The use of capital surplus for the payment of dividends, although permitted under the General Corporation Law of Delaware, it was said, has been severely criticized. The surplus account was termed "of indeterminate character." The company had started with an original capital surplus and had added earnings, declared dividends, and after a period of several years' operation retained a surplus below the original amount. During the calendar years of 1936 and 1937, it was pointed out, the corporation had paid out in cash dividends more than it earned "on a corporate basis." Consolidated income of the system was estimated at a higher sum than the corporate income.

The commission also took into consideration certain extraordinary litigation of subsidiary companies aggregating a large amount. *Re Columbia Gas & Electric Corp. (File No. 51-12).*



Right of Utility to Restrain Municipal Plant Operation

A FEDERAL COURT decree dismissing a suit by the Missouri Public Service Corporation to restrain the city of Trenton and others from constructing an electric light plant and distribution system for the purpose of entering into competition with the utility company was

affirmed by the circuit court of appeals, eighth circuit. The municipality had the right under local law to construct such a plant, and the objections raised by the company were based largely upon failure to comply with statutory requirements relating to advertising for bids.

The court made the following statement:

A decree which would leave the city with a completed plant on its hands which it could never operate, merely because it had published its notices in the wrong newspapers and had failed to include in its notices the matter required by §13320a, could not be justified.

The court also went into the question of the right of the utility company to seek an injunction against threatened competition which would be unlawful, stating:

We are of the opinion that the appellant, whether it had the franchise which it claims or not, had an interest sufficient to enable it to maintain this suit in so far as it sought to enjoin the threatened competition which it claimed would be unlawful.

The decisions of this court upon which the appellant relies (*Campbell v. Arkansas-Missouri Power Co.* [1932] 55 F. (2d) 560, and *Arkansas-Missouri Power Co. v. Kennett* [1935] 78 F. (2d) 911, 21 P.U.R.(N.S.)

612), particularly when read in the light of what has been said recently by the Supreme Court in *Alabama Power Co. v. Ickes* (1938) 302 U. S. —, 82 L. ed. —, 21 P.U.R.(N.S.) 289, 58 S. Ct. 300, do not authorize the granting of the relief prayed for. Those cases are to be regarded as cases in which this court reached the conclusion that, while the municipality had the right to enter into competition with the utility, the method adopted by the municipality to enable itself to exercise that right involved the doing of unlawful acts of a substantial and fundamental character so closely related to the proposed competition with the utility as to make such competition unlawful. In *Campbell v. Arkansas-Missouri Power Co.* *supra*, the municipality proposed to exceed its lawful debt limit in order to compete with the utility. In *Arkansas-Missouri Power Co. v. Kennett*, *supra*, the construction of the plant involved an unlawful delegation of power by the city. It is unnecessary to re-examine our rulings in those cases.

Missouri Public Service Corp. v. Fairbanks, Morse & Co. et al., 95 F. (2d) 1.



Pipe-line Construction by Company Whose Franchise Rights Have Expired

PUBLIC convenience and necessity, in the opinion of the Michigan commission, would not be served by granting authority to a local gas distributing company to construct a pipe line to obtain natural gas from an interstate transmission company when the company's franchise rights have expired. The people of the city should be free to decide whether they will grant a new franchise and the terms of the franchise, involving such questions as taking interstate gas or local gas, without coercion or prejudice because of an investment in such a pipe line.

A contention that the commission lacked jurisdiction was overruled. It was pointed out that the company challenged the power of the commission to deny a certificate although it applied to the commission to grant such a certificate. The commission said:

We find and hold that the gas company by applying to this commission for a certificate of convenience and necessity is now estopped from denying the commission's jurisdiction

to determine convenience and necessity; also that applicant by such application has, for the purpose of this proceeding, irrevocably confirmed the necessity and propriety of a determination by this commission of the convenience and necessity of the proposed pipe line.

Although the proposed line would connect with an interstate gas transmission line, the commission held that the transportation of gas from this line to the city would be local and only an incident of local distribution. It would not constitute interstate commerce, and the commission in denying authority would not restrain interstate commerce. Any possible restraint would be indirect, remote, and incidental to an authorized local regulation in the public interest.

The commission overruled a claim that the company had a perpetual right to serve in the municipality although its franchise had expired. The claim was based upon rights acquired by a predecessor company to furnish gas for lighting so long as the company should con-

THE LATEST UTILITY RULINGS

tinue to supply gas for lighting and should comply with the restrictions and conditions of the ordinance. Any perpetual rights acquired by the earlier company were held to have been barred by expiration of that company's charter, lack

of authority to transfer franchise privileges in earlier years, and written acceptance of a later franchise ordinance expressly repealing the franchise obtained earlier. *Re Washtenaw Gas Co. (D-1374).*



Certificate of Compliance As Condition of Connection with Electric Lines

COMPLAINT was filed with the Pennsylvania commission that the Metropolitan Edison Company under its rules and regulations required certificates of compliance issued by the Middle Department Rating Association or a municipal inspection bureau before making a connection with the company's lines. It was testified that there was no municipal inspection bureau and that certificates from properly qualified representatives of a Pennsylvania corporation organized and making such inspection at reduced cost were refused. The commission, after reviewing the facts, sustained the complaint and issued a rule requiring the company to show cause why it should not establish a different rule.

The commission, upon the return of

the rule, held that it had jurisdiction to determine that the existing rule was unfair and ordered the establishment of the following rule:

There shall be no obligation on the part of company either to connect or remain connected with any consumer's wiring or facilities when the installation is not made and maintained in accordance with the provisions of the National Electrical Code and company's requirements or when the certificate of compliance with the regulation of the National Board of Fire Underwriters, issued by the Middle Department Rating Association or the municipal inspection bureau or by any competent inspection agency, has not been issued.

Anspach v. Metropolitan Edison Co. (Complaint Docket No. 11378); Pennsylvania Public Utility Commission v. Metropolitan Edison Co. (Complaint Docket No. 11407).



Regulation of Municipal Plant Rates to Nonresident Consumers

AN application by the city of Billings to increase rates to consumers outside of the corporate limits was granted by the Montana commission only to the extent that rates were required to be increased to cover additional pumping costs incurred for certain outside consumers. The commission held that it had jurisdiction over the rates beyond city limits and expressed its views in part as follows:

When a city acts in its proprietary capacity in supplying water to consumers, it is to be treated in much the same manner as a private utility and stands upon the same footing as a private individual or a business corporation similarly situated

In this case the city of Billings is supplying water to consumers residing without its corporate limits and has been supplying water to some of these consumers for many years past. When the city of Billings began supplying water to consumers beyond its corporate limits, a thing which it was not required to do, it obligated itself to treat all persons served, both within and without its corporate limits, without discrimination. The mere fact that the city acted when it did not have to act will not now furnish a shield for discrimination as between those it had to serve and those it now voluntarily serves. The corporate limits in such a case should never be construed as a point which determines different rights as between the patrons of the utility, because all consumers, both within and without the city, who are served with water by the city have the same rights

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as far as discrimination is concerned—no more, no less.

Water rates paid by consumers, it was pointed out, are not taxes but simply the price paid for water as a commodity. There is no direct relation between taxes paid and water service received by a taxpayer who is a water user. The water consumer need only pay a reasonable rate. The commission continued:

Here the water consumer is forced to pay a rate which will give the city a fair return on its investment, pay for the operation of the water department, contribute to reserve funds, which are not used as contemplated by law, and, in addition, contribute capital for the construction and betterment of the water system. And this is not all. By contributing capital for the construction and betterment of the water system, the consumer is penalized, since the city is requiring him to do something that he is not required to do by law, since he is, in fact, required to pay interest on his own money.

Furthermore, when a part of the rate charged the consumer is placed in the depreciation account of a utility, this account should be used for the purpose stated. The consumer, under such circumstances, has the right to assume that that account is for depreciation and that the utility will not divert it to any other purpose and when the life of the plant expires, ask the consumer to pay a higher rate than is reasonable in order to construct the plant anew.

The commission was of the opinion that ordinarily a municipal plant should be considered as a whole and not in separate units in determining a fair and reasonable rate to be charged by the utility to its consumers and that political boundary lines should be disregarded and rates fixed which treat all customers the same. In this case, however, because of additional pumping costs a differential was authorized for certain customers outside the city. *Re City of Billings (Docket No. 2503, Report and Order No. 1706).*



Discrimination by City Plant between Industry And Neighboring City Utility

ALTHOUGH a municipality operating a public utility plant may charge a higher rate to customers outside its borders, it cannot, in the opinion of the West Virginia commission, unjustly discriminate between such outside users. On this premise the commission held unjustly discriminatory average rates of 38 cents per thousand gallons of water furnished to an adjacent municipal corporation while an industrial customer paid only an average of 17½ cents per thousand gallons. The commission said:

It is true that this and other regulatory commissions recognize that it is proper to classify consumers into industrial and domestic groups and to accord the former group a more favorable rate, but we are not impressed with the argument that this principle is applicable to this situation. The intervenor (the adjacent municipal corporation) is not that kind of a domestic customer. Rates, to be lawful, must be based on the cost of service.

The commission authorized rates outside of the municipal limits 10 per cent in excess of the rates applicable within the

corporate limits but authorized a rate to the municipal corporation 15 per cent in excess of the rate applicable within corporate limits. The commission did not believe that the 5 per cent difference constituted an unlawful discrimination such as is prohibited by law in view of testimony as to the reason for the difference. A representative of the municipal water board had asserted that a lower rate to the industry was not unreasonable because the company used the water it purchased in producing great wealth in the community and in providing labor and employment for the people residing therein, while the municipal corporation, on the other hand, acquired water primarily for resale to domestic consumers, its own inhabitants.

The commission held that in view of a charter provision relating to the application of funds of the municipal plant but making no provision for disposition for any earnings over and above operating expenses, cost of repairing, improving, enlarging, extending, or adding to the

THE LATEST UTILITY RULINGS

waterworks plant and the payment of interest and sinking-fund requirements, the municipal plant could not collect any revenues over and above that required

for reasonable operating expenses, bond requirements, and a reasonable sum for ordinary improvements. *Re Clarksburg Water Board (Case No. 2356).*



Change in Ordinance Contract Rate without City's Consent

THE old dispute fought out in many jurisdictions several years ago as to whether rates fixed by contract could be changed by regulatory action was revived in a recent complaint by the Workmen's Alliance, the Central Labor Union, and the Unemployed Brotherhood of Pennsylvania against the Peoples Natural Gas Company. These organizations alleged that the utility had breached the terms of a contract entered into in 1912 with the city of Altoona in connection with a franchise ordinance which granted an exclusive right to furnish natural gas at a rate not in excess of 50 cents per thousand feet.

The commission dismissed the complaint, after citing the settled authori-

ties on the question, with this statement:

There is ample authority sustaining the contention of respondents that the change of a rate fixed by contract for the performance of service by a public utility company does not impair the obligation of a contract under the Constitution of the United States. Complainants have not cited any decided cases, nor have we been able to find any, to sustain their contention that the ordinance contract could not be altered or changed without the assent of the municipality.

The rate had been increased in 1922 and after the increase a number of complaints had been filed. These had been dismissed by the public service commission. *Workmen's Alliance et al. v. The Peoples Natural Gas Co. (Complaint Docket No. 11396).*



Interstate Commerce between Points within a State

A MOTOR carrier engaged in transporting property between points within a state but passing en route through another state was held by a Federal court to be engaged in interstate commerce. The court said in part:

True it is that commerce is undoubtedly traffic plus intercourse, and the carriage of freight and passengers between two points in one state, during which route there is passage over the soil of another state, will not render that business foreign, which is domestic. . . .

But, again, clarity must come from recog-

nizing the difference of regulation sought in each case. For instance, in *Western Union Telegraph Co. v. Speight* (1920) 254 U. S. 17, 41 S. Ct. 11, 65 L. ed. 104, it was definitely shown that a telegram originating in a state for transmission to another point in that state, but which actually traversed a second state, following the practice and employing the established system of wires, was interstate commerce.

The court discussed the apparently conflicting decisions on this question. *Roundtree v. Terrell et al.*, 22 F. Supp. 297.



Commutation and Round Trip Tickets of Ferry Company

THE Washington Department of Public Service, which in a previous order had provided that family commuta-

tion passenger tickets or books should be issued for twenty one-way rides to be used within a 40-day period, held that

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the time limit should be extended to sixty days. Ferry patrons on Puget Sound had universally objected to the shorter limitations, and the extension, in the opinion of the department, would be beneficial to all parties concerned.

The earlier order had also provided that automobile commutation tickets or books should be issued in two forms, one good for ten one-way rides to be used within thirty days and the other good for ten one-way rides to be used within seven days. The commission was of the opinion that the time limit on the one type of commutation ticket should be extended from thirty days to forty days so that it might be used by parties who travel only on week-ends.

Elimination of a round trip rate estab-

lished by the earlier order was authorized. One of the reasons which prompted the department to establish the round trip rate in the previous case was a recognition of the fact that when it shortened the time limit on family commutation tickets it thereby forced many island and peninsula residents to forego the commutation privilege and pay the same as the casual traveler. The commission said that with reestablishment of the 60-day limit that reason no longer existed, and the commission was of the opinion that additional revenue needed should be provided by the casual traveler rather than by the commuters who form the backbone of the service. *Department of Public Service of Washington v. Puget Sound Navigation Co.* (F. H. 7110).



Other Important Rulings

THE supreme court of Arkansas sustained a judgment for penalties against a telephone company for failure to furnish joint user service directory listing. The court held that a telephone company which offers directory listing facilities to the subscribers cannot furnish them to some and deny them to others. The court also held that the provisions for penalties for discrimination had not been repealed by the act creating the department of public utilities to regulate public utility activities generally. *Southwestern Bell Telephone Co. v. Matlock*, 111 S. W. (2d) 500.

The California commission, in authorizing the Pacific Electric Railway Company to abandon local passenger service, ruled that if the applicant can show that public convenience and necessity do not require the continued operation of its passenger service with due consideration to operating results, it will not be required to make a showing with respect to its freight operation. The commission also said that ordinarily it is improper for a carrier to continue the operation of a

service which cannot reasonably be justified from a public transportation standpoint and one which is operated at an out-of-pocket loss that must be carried by more profitable lines of the system. *Re Pacific Electric Railway Co.* (Decision No. 30650, Application No. 21467).

The supreme court of Ohio held that a municipality has the power to enact an ordinance to fix rates for gas even after a utility has filed an application with the commission to increase its rates. *City of Norwalk v. Public Utilities Commission of Ohio*, 13 N. E. (2d) 721.

The Pennsylvania commission held that the charging of intrastate toll rates by the Bell Telephone Company of Pennsylvania higher than the rates for service rendered by the American Telephone and Telegraph Company over comparable distances in interstate service was unreasonably discriminatory and should be discontinued. *Pennsylvania Public Utility Commission v. The Bell Telephone Co. of Pennsylvania* (Complaint Docket No. 11423).

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports*.

PREPRINTED FROM

Public Utilities Reports

COMPRISING THE DECISIONS, ORDERS, AND
RECOMMENDATIONS OF COURTS AND COMMISSIONS



VOLUME 22 P.U.R. (N.S.)

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Q These reports are published annually in five bound volumes, with an *Annual Digest*. The volumes are \$6.00 each; the *Annual Digest* \$5.00. A year's subscription to PUBLIC UTILITIES FORTNIGHTLY, when taken in combination with a subscription to the Reports, is \$10.00.

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[No. 636.]

(— U. S. —, 82 L. ed. —, 58 S. Ct. 678.)

Interstate commerce, § 84 — Powers of Congress — Public utility holding companies — Affiliated companies.

1. A top holding company and associated public utility companies in a holding company system were held to be within the ambit of congressional authority where they or their affiliates conducted electric operations in a large number of states, some selling energy in interstate commerce, and where the carrying out of intercompany service contracts involved continuous and extensive use of the mails and instrumentalities of interstate commerce, p. 470.

Statutes, § 4 — Separability of provision — Presumptions — Legislative declaration.

2. A provision in an act of Congress that if any provision of the act be invalid the remainder shall not be affected thereby reverses the presumption of inseparability of the different sections of the act and establishes the opposite presumption of divisibility, p. 471.

Statutes, § 4 — Separability of provision — Holding Company Act.

3. Provisions of §§ 4 (a) and 5 of the Public Utility Holding Company Act of 1935, 15 USCA §§ 79d (a), 79e, providing for registration of holding companies and prohibiting the use of the mails and instrumentalities of interstate commerce to those companies which fail to register are not so interwoven with the other provisions of the act that there is any inherent or practical difficulty in the separation and independent enforcement of the former while reserving all questions as to the validity of the latter, p. 471.

Injunction, § 41 — Effect — Adjudication as to statute in force — Rights reserved.

4. Affirmance by the Supreme Court of a decree enjoining companies associated in a public utility holding company system from carrying on activities which are forbidden to nonregistered holding companies by the Public Utility Holding Company Act of 1935, 15 USCA §§ 79d (a), 79e, until they shall register, without prejudice to any rights or remedies which the companies might have after registration and leaving the companies free to challenge the validity of any of the provisions of the act other than such sections, constitutes a specific adjudication that registration will be without prejudice to future challenge of the validity of such other provisions of the act, p. 471.

Intercompany relations, § 19.1 — Public Utility Holding Company Act — Separability of provisions — Registration.

5. The registration provisions of the Public Utility Holding Company Act

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of 1935, 15 USCA §§ 79d (a), 79e, themselves constitute an effective instrument of informatory regulation, and the fact that registration underlies the application of subsequent requirements of the statute does not prevent such registration provisions from having a purpose and a value of their own; requirement of a registration statement containing a variety of detailed information as to corporate structure and activities is a regulation which Congress could have regarded as important in itself and could have made the subject of a separate statute, and that it is found in a statute imposing other regulations does not deprive it of its essential character and its capacity to stand alone, p. 471.

Statutes, § 12 — Interpretation — Legislative history.

6. A review of the legislative history of an act of Congress to determine whether sections of the act are separable is unnecessary when the act speaks for itself with sufficient clarity, p. 471.

Statutes, § 4 — Separability of provisions — Public Utility Holding Company Act.

7. The registration provisions of the Public Utility Holding Company Act of 1935, 15 USCA §§ 79d (a), 79e, are separable from the remainder of the act, p. 471.

Constitutional law, § 2 — When question decided — Separable sections of act.

8. The court, in reviewing a decree enjoining activities of companies comprising a public utility holding company system which are forbidden to nonregistered holding companies by the Public Utility Holding Company Act of 1935, need not determine whether provisions other than the registration provisions are valid or invalid, if the registration provisions are valid and can be separately enforced, p. 471.

Reports, § 2 — Requirement of information — Permissibility.

9. The requirement of information is in itself a permissible and useful type of regulation, p. 474.

Interstate commerce, § 84 — Federal regulation — Effect of intercorporate relations.

10. That companies associated in a public utility holding company system conduct transactions in interstate commerce through the instrumentalities of subsidiaries cannot avail to remove them from the reach of the Federal power, since it is the substance of what they do and not the form in which they clothe their transactions which must afford the test, p. 474.

Public utilities, § 6 — Powers of Congress — Regulation.

11. Regulation is addressed to practices which appear to need supervision, correction, or control; and to determine what regulation is essential or suitable Congress is entitled to consider and to estimate whatever evils exist, p. 474.

Intercorporate relations, § 5.2 — Powers of Congress — Requirement of information — Holding companies.

12. Congress is entitled to demand of companies associated in a public utility holding company system the fullest information as to organization, financial structure, and all the activities which could have any bearing upon the exercise of congressional authority, p. 474.

Interstate commerce, § 1 — Powers of Congress — Prohibition of transactions.

13. When Congress lays down a valid rule to govern those engaged in

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transactions in interstate commerce, Congress may deny to those who violate the rule the right to engage in such transactions, p. 474.

Constitutional law, § 27 — Postal powers of Congress — Denial of use of mails.

14. When Congress lays down a valid regulation pertinent to the use of the mails, it may withdraw the privilege of that use from those who disobey, although Congress may not exercise its control over the mails to enforce a requirement which lies outside its constitutional province, p. 474.

Constitutional law, § 2 — When questions decided — Hypothetical controversies.

15. Companies associated in a public utility holding company system are not entitled, in a suit to enforce the registration provisions of the Public Utility Holding Company Act of 1935, to invoke the Federal Declaratory Judgment Act in order to obtain an advisory decree as to the constitutionality of provisions of the act other than the registration provisions, the court must decline an invitation to enter into a speculative inquiry for the purpose of condemning statutory provisions the effect of which in concrete situations not yet developed cannot now be definitely perceived, p. 477.

(McREYNOLDS, J., dissents.)

[March 28, 1938.]

W RIT of certiorari to United States Circuit Court of Appeals for the Second Circuit to review a decree enjoining unregistered holding companies from carrying on activities in interstate commerce or through the mails which are forbidden by the Public Utility Holding Company Act of 1935, and dismissing a cross-bill seeking an injunction against enforcement of provisions of the act; affirmed. For decision by Circuit Court of Appeals, see 21 P.U.R.(N.S.) 299.

Mr. Chief Justice HUGHES delivered the opinion of the court: The Securities and Exchange Commission brought this suit to enforce the provisions of §§ 4 (a) and 5 of the Public Utility Holding Company Act of 1935 (15 USCA § 79) 49 Stat. 803, 812, 813. These sections provide for registration with the Commission of holding companies, as defined, § 5 (a), and prohibit the use of the mails and the instrumentalities of interstate commerce to those companies which fail to register. Section 4(a). Section 5 (b) provides for the filing of a registration statement giving information with respect to the organi-

zation, financial structure, and nature of the business of the registrant, together with various details of operations.

Defendants, including interveners, contested the validity of these provisions and sought by cross-bill a declaratory judgment that the act was invalid in its entirety, as being in excess of the powers granted to Congress by § 8 of Art. I, and in violation of § 1 of Art. I and of the Fifth and Tenth Amendments, of the Constitution of the United States. The district court sustained the validity of §§ 4 (a) and 5, and granted an injunction accordingly. The cross bill

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was dismissed for want of equity and for lack of any actual controversy within the meaning of the Federal Declaratory Judgment Act of 1934. (1937) 18 F. Supp. 131. The circuit court of appeals affirmed the decree. (1937) 92 F. (2d) 580, 21 P.U.R. (N.S.) 299. Certiorari was granted (1938) 302 U. S. —, 82 L. ed. —, 58 S. Ct. 411.

The suit was brought against the Electric Bond and Share Company and fourteen associated public utility companies. Of these, it appears that seven have ceased to be holding companies within the meaning of the act, two¹ before the cause was heard by the district court and five² since the decree. The remaining companies against whom the decree of injunction runs are Electric Bond and Share Company, American Gas and

Electric Company, American Power & Light Company, National Power & Light Company, Electric Power & Light Corporation, Lehigh Power Securities Corporation, Utah Power & Light Company, and Pacific Power & Light Company.

The decree provides in substance, as to each of these defendants, that after a day specified and until such defendant shall cease to be a holding company as defined in the act, § 2, or shall register with the Securities and Exchange Commission as provided in § 5 (a), it shall not carry on any of the activities in interstate commerce or through the mails which are forbidden to nonregistered holding companies by pars. (1), (2), (3), (4), and (6) of § 4 (a). The provisions of §§ 4 (a) and 5 (15 USCA § 79d, e) are set forth in the margin.³

¹ Idaho Power Company and The Montana Power Company.

² United Gas Corporation, United Gas Public Service Company, Houston Gulf Gas Company, Nebraska Power Company, and Power Securities Company.

³ "Section 4. (a). After December 1, 1935, unless a holding company is registered under § 5, it shall be unlawful for such holding company, directly or indirectly—

"(1) to sell, transport, transmit, or distribute, or own or operate any utility assets for the transportation, transmission, or distribution of, natural or manufactured gas or electric energy in interstate commerce;

"(2) by use of the mails or any means or instrumentality of interstate commerce, to negotiate, enter into, or take any step in the performance of, any service, sales, or construction contract undertaking to perform services or construction work for, or sell goods to, any public utility company or holding company;

"(3) to distribute or make any public offering for sale or exchange of any security of such holding company, any subsidiary company or affiliate of such holding company, any public utility company, or any holding company, by use of the mails or any means or instrumentality of interstate commerce, or to sell any such security having reason to believe that such security, by use of the mails or any means or instrumentality of interstate

commerce, will be distributed or made the subject of a public offering;

"(4) by use of the mails or any means or instrumentality of interstate commerce, to acquire or negotiate for the acquisition of any security or utility assets of any subsidiary company or affiliate of such holding company, any public utility company, or any holding company;

"(5) to engage in any business in interstate commerce; or

"(6) to own, control, or hold with power to vote, any security of any subsidiary company thereof that does any of the acts enumerated in paragraphs (1) to (5), inclusive, of this subsection.

"Section 5. (a) On or at any time after October 1, 1935, any holding company or any person purposing to become a holding company may register by filing with the Commission a notification of registration, in such form as the Commission may by rules and regulations prescribe as necessary or appropriate in the public interest or for the protection of investors or consumers. A person shall be deemed to be registered upon receipt by the Commission of such notification of registration.

"(b) It shall be the duty of every registered holding company to file with the Commission, within such reasonable time after registration as the Commission shall fix by rules and regulations or order, a registration statement

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The decree further provides that the injunction and the dismissal of the cross bill shall be without prejudice "to any rights or remedies in law or in equity" which defendants may have after registration, and leaves defendants free to challenge the validity of any of the provisions of the act, other than §§ 4 (a) and 5. The dismissal of the cross-appeal is also declared to be without prejudice "to any rights or remedies in law or in equity" which the intervening defendants "may have or be entitled to upon the act being

in such form as the Commission shall by rules and regulations or order prescribe as necessary or appropriate in the public interest or for the protection of investors or consumers. Such registration statement shall include—

"(1) such copies of the charter or articles of incorporation, partnership, or agreement, with all amendments thereto, and the bylaws, trust indentures, mortgages, underwriting arrangements, voting-trust agreements, and similar documents, by whatever name known, of or relating to the registrant or any of its associate companies as the Commission may by rules and regulations or order prescribe as necessary or appropriate in the public interest or for the protection of investors or consumers.

"(2) such information in such form and in such detail relating to, and copies of such documents of or relating to, the registrant and its associate companies as the Commission may by rules and regulations or order prescribe as necessary or appropriate in the public interest or for the protection of investors or consumers in respect of—

"(A) the organization and financial structure of such companies and the nature of their business;

"(B) the terms, position, rights, and privileges of the different classes of their securities outstanding;

"(C) the terms and underwriting arrangements under which their securities, during not more than the five preceding years, have been offered to the public or otherwise disposed of and the relations of underwriters to, and their interest in, such companies;

"(D) the directors and officers of such companies, their remuneration, their interest in the securities of, their material contracts with, and their borrowings from, any of such companies;

"(E) bonus and profit-sharing arrangements;

made applicable to them by the registration of any holding company of which they are subsidiary companies." All rights of defendants, including interveners, are thus fully reserved with respect to the application to them of any provision of the act outside of those contained in the particular sections which are enforced by the decree.

Petitioners insist that the act is invalid as a whole; that the provisions of §§ 4(a) and 5 are not separable from the remainder; that these provisions, if separately considered, do not consti-

"(F) material contracts, not made in the ordinary course of business, and service, sales, and construction contracts;

"(G) options in respect of securities;

"(H) balance sheets for not more than the five preceding fiscal years, certified, if required by the rules and regulations of the Commission, by an independent public accountant;

"(I) profit and loss statements for not more than the five preceding fiscal years, certified, if required by the rules and regulations of the Commission, by an independent public accountant;

"(3) such further information or documents regarding the registrant or its associate companies or the relations between them as the Commission may by rules and regulations or order prescribe as necessary or appropriate in the public interest or for the protection of investors or consumers.

"(c) The Commission by such rules and regulations or order as it deems necessary or appropriate in the public interest or for the protection of investors or consumers, may permit a registrant to file a preliminary registration statement without complying with the provisions of subsection (b); but every registrant shall file a complete registration statement with the Commission within such reasonable period of time as the Commission shall fix by rules and regulations or order, but not later than one year after the date of registration.

"(d) Whenever the Commission, upon application, finds that a registered holding company has ceased to be a holding company, it shall so declare by order and upon the taking effect of such order the registration of such company shall, upon such terms and conditions as the Commission finds and in such order prescribes as necessary for the protection of investors, cease to be in effect. The denial of any such application by the Commission shall be by order."

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tute a valid regulation of interstate commerce and the mails; and that the cross-bill presented a controversy upon the merits of which the defendants, including interveners, were entitled to the judgment of the court.

[1] *First.* The initial question is whether the defendant companies, against which the decree for injunction runs, are engaged in activities which bring them within the ambit of congressional authority. Upon this point there seems to be no serious controversy, and for the purpose of the present decision we do not find it necessary to make a comprehensive statement of the corporate set-up and operations of the respective defendants. The facts were fully set forth in an elaborate stipulation which underlay the findings of fact of the trial court. A brief statement addressed to the point now under consideration will suffice.

Electric Bond and Share Company is styled in the findings as "the top holding company" in "a holding company system" in which all the other defendants and intervening defendants together with numerous other companies are subsidiaries. Electric Bond and Share Company owns substantial minorities of the voting stocks of the defendants American Gas and Electric Company, American Power & Light Company, National Power & Light Company, and Electric Power & Light Corporation. These companies in turn own directly or through subholding companies substantial majorities, in some cases approximating complete ownership and in all cases sufficient to insure voting control, of the common stocks of operating gas and electric utilities. The "electric operations" of subsidiaries in the Bond and Share

system are conducted in thirty-two states. Some operate only within a single state, some in two or more states, transmitting energy across state lines for their own account, and some sell energy at wholesale in interstate commerce.

Until shortly prior to the institution of this suit Electric Bond and Share Company rendered services to both holding and operating companies under service contracts. After the approval of the act, it formed a wholly owned subsidiary, Ebasco Services Incorporated, to take over the servicing of the operating companies and the servicing of the holding companies was discontinued. The performance of service contracts by Ebasco, operating as a subsidiary and on behalf of Electric Bond and Share Company, constitutes an extensive business in rendering continuous expert, specialized, and technical service, advice, and assistance to the serviced companies upon every phase of the utility enterprise. Phoenix Engineering Corporation, a wholly owned subsidiary of Ebasco, performs construction work for subsidiary public utility companies in the Bond and Share system. The American Gas and Electric Company also performs services for subsidiary operating companies.

We need not go further in the description of the operations of these companies, as petitioners concede that the carrying out of these service contracts, as found by the trial court, involves continuous and extensive use of the mails and instrumentalities of interstate commerce, although petitioners are careful to qualify the concession by saying that they agree with the trial court that "this is not to say

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that the entire business of Ebasco or American Gas constitutes interstate commerce and is therefore subject to unlimited Federal regulation."

Petitioners also state with respect to American Power & Light Company, National Power & Light Company, and Electric Power & Light Corporation, that while it is insisted that these are simply investment holding companies and that their business as such is not interstate commerce, they may "from time to time engage in transactions in interstate commerce or may use the instrumentalities of interstate commerce in particular transactions, such as the distribution of securities, in such manner that those particular activities become the subject of Federal regulation."

The trial court found that one or more subsidiary electric utility companies of Lehigh Power Securities Corporation "are regularly engaged in selling, purchasing, or transmitting some electric energy across state lines"; and that Utah Power & Light Company and Pacific Power & Light Company are both holding companies and electric utility companies and that the transmission of electric energy across state lines is part of the enterprise of each.

In the light of the findings supported by the stipulation, we perceive no ground for a conclusion that the defendant companies which are enjoined are not engaged in activities within the reach of the congressional power.

[2-8] *Second.* Challenging the validity of the act in its entirety, petitioners contend that §§ 4(a) and 5 cannot be separated from the other provisions of the act and thus be separately sustained and enforced. They

urge that these sections are purely auxiliary to the subsequent or "control provisions" of the act (§§ 6 to 13); that the object of this suit is to compel submission to an integrated system of control and that the sole question is whether the act as a whole, "or enough to accomplish its general plan," is constitutional. They insist that this question must be determined before they may be compelled to register.

(1) In this branch of the case, petitioners address their argument to the *intent* of Congress, rather than to its *power*. But Congress has defined its intent as to separability. Section 32 of the act (15 USCA § 79z) provides:

"If any provision of this title⁴ or the application of such provision to any person or circumstances shall be held invalid, the remainder of the title and the application of such provision to persons or circumstances other than those as to which it is held invalid shall not be affected thereby."

This provision reverses the presumption of inseparability—that the legislature intended the act to be effective as an entirety or not at all. Congress has established the opposite presumption of divisibility. *Williams v. Standard Oil Co.* 278 U. S. 235, 242, 73 L. ed. 287, P.U.R.1929A, 450, 49 S. Ct. 115, 60 A.L.R. 596; *Utah Power & Light Co. v. Pfost* (1932) 286 U. S. 165, 184, 76 L. ed. 1038, 52 S. Ct. 548; *Champlin Refining Co. v. Corporation Commission* (1932) 286 U. S. 210, 235, 76 L. ed. 1062, 52 S. Ct. 559, 86 A.L.R. 403. Congress has thus said that the statute is not an integrated whole, which as

⁴The "title" is "Title I—Control of Public Utility Holding Companies."

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such must be sustained or held invalid. On the contrary, when validity is in question, divisibility and not integration is the guiding principle. Invalid parts are to be excised and the remainder enforced. When we are seeking to ascertain the congressional purpose, we must give heed to this explicit declaration.

(2) It is evident that the provisions of §§ 4(a) and 5 are not so interwoven with the other provisions of the act that there is any inherent or practical difficulty in the separation and independent enforcement of the former while reserving all questions as to the validity of the latter. The administrative construction of the statute was formulated in that view. Rule 4 of the Commission provided that any person, in filing any statement under the act, might include an express reservation of constitutional and legal rights. It was on the basis of that construction that this suit was prosecuted and was limited to the enforcement of §§ 4(a) and 5. All rights and remedies as to all other provisions of the act are, as we have seen, expressly reserved to the defendants by the decree. Nor can it be said that this reservation is illusory. If this decree is affirmed, it will constitute a specific adjudication that registration will be without prejudice to future challenge of the validity of any provision of the act, or requirement of the Commission, outside of §§ 4(a) and 5. It is idle to contend that registration pursuant to the decree will subject the defendants to the act as an integrated whole or bring into operation against them what the decree expressly excludes.

(3) Although there is no practical
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obstacle to the separate enforcement of the provisions of §§ 4(a) and 5, the argument is pressed that in reason and design there is an essential unity of these provisions and the so-called "control provisions" which forbids such enforcement. Petitioners urge that §§ 4(a) and 5 "merely implement the system of controls"; that the policy of the act as declared in § 1 (c) is to compel "the simplification and the elimination of holding company systems"; and that the objective cannot be attained by informatory processes but only by such regulation or control as will "eliminate" the evils.

The government replies that while the other provisions are applicable only to registered companies and their subsidiaries, §§ 4(a) and 5 are drafted so as to be operative independently and that the registration provisions themselves constitute "an effective instrument of informatory regulation." "If, for example," argues the government, "§ 11 dealing with corporate reorganizations were adjudged invalid, there is no inherent reason why the other regulatory provisions could not be enforced as the Congress provided. And if § 13 dealing with service contracts were adjudged invalid, there is no inherent reason why the registration provisions, or §§ 6 and 7 regulating security issues, or §§ 8, 9, and 10 dealing with utility acquisitions, could not be administered in accordance with their terms." "Likewise," it is said, "the purpose and effect of the registration provision—regulation by the informatory process—are the same whether registration is considered as a separate statute regulating utility holding companies, or as but one part of a comprehensive statute containing

many different regulations of utility holding companies." Moreover, as observed by the district court, § 1 (c) in its entirety negatives any conclusion that the simplification and elimination of holding companies "is the sole policy or the whole end and object of the act which, as stated, is 'to meet the problems and eliminate the evils, as enumerated in this section, connected with public utility holding companies,'" and thus "simplification and elimination" are but a means and not "the exclusive means" deemed to be essential for the purpose of effectuating such policy "in whole or in so far as may be constitutionally possible."

We think that the manner in which the act is framed and the variety of provisions it contains, when viewed in the light of the presumption of divisibility, justify that conclusion. The fact that registration underlies the application of subsequent requirements of the statute does not prevent the provisions of §§ 4(a) and 5 from having a purpose and a value of their own. Section 5 not only provides in paragraph (a) for the filing of a "notification of registration" but also requires by paragraph (b) every registered holding company to submit, within a reasonable time after registration, a "registration statement" containing a variety of detailed information as to corporate structure and activities. Thus § 5(b) is itself a "control" provision, which is immediately operative. The duty to supply the described information is separately and definitely prescribed.

It cannot be denied that a requirement of this sort is a regulation which Congress could have regarded as important in itself and could have made

the subject of a separate statute. The fact that it is found in a statute imposing other regulations, or that it precedes the application of the others, does not deprive it of its essential character and its capacity to stand alone. Regulation requiring the submission of information is a familiar category. Information bearing upon activities which are within the range of congressional power may be sought not only by congressional investigation as an aid to appropriate legislation, but through the continuous supervision of an administrative body. See *Interstate Commerce Commission v. Brimson* (1894) 154 U. S. 447, 474, 155 U. S. 3, 38 L. ed. 1047, 39 L. ed. 49, 14 S. Ct. 1125, 15 S. Ct. 19; *Interstate Commerce Commission v. Goodrich Transit Co.* (1912) 224 U. S. 194, 211, 56 L. ed. 729, 32 S. Ct. 436; *American Teleph. & Teleg. Co. v. United States* (1936) 299 U. S. 232, 235, 81 L. ed. 142, 16 P.U.R. (N.S.) 225, 57 S. Ct. 170. Congress may use this method in connection with a comprehensive scheme of regulation, as, for example, in the case of the Interstate Commerce Commission and the Federal Communications Commission; or Congress may employ this informatory process independently. An illustration of the latter is found in the statute relating to newspapers and periodicals, enjoying the privileges accorded to second class mail, which requires an annual statement setting forth the names and addresses of the editor, publisher, business manager, owner, and, in case of ownership by a corporation, the stockholders, and also the names of known bondholders or other security holders, together with a statement as to cir-

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culatation. 39 USCA § 233. See *Lewis Publishing Co. v. Morgan* (1913) 229 U. S. 288, 57 L. ed. 1190, 33 S. Ct. 867.

Petitioners refer to the limitations upon publicity contained in § 22 and contrast this provision with that of the Securities Act of 1933, § 6(d), 48 Stat. 74, 78. But § 22 provides that the information shall be available to the public when in the judgment of the Commission its disclosure would be in the public interest or the interest of investors or consumers. The limitations are plainly intended to safeguard particular information which may be regarded as of a private or confidential character and as not directly concerning the public interest. They do not detract from the value which may be deemed to attach to the requirement that the described information should be furnished, whether as an aid to legislation or as facilitating administrative supervision or as securing a desirable publicity.

Both parties invoke the legislative history of the act. Petitioners contend that this shows that control, not publicity, was intended. The government insists that the legislative history supports the presumption of separability: It is unnecessary to review the details of the arguments or the cited statements from the legislative halls. The act speaks for itself with sufficient clarity. The government points to six groups of regulatory provisions contained in the act, viz., registration (§§ 4 and 5); issuance of securities (§§ 6 and 7); acquisition of securities and utility assets (§§ 8, 9, and 10); corporate simplification and reorganization (§ 11); service contracts and other intercompany transactions

(§§ 12 and 13); and reports and accounts (§§ 14 and 15). We see nothing in the legislative history of the act which requires the conclusion that all these groups were intended to constitute a unitary system, no part of which can fail without destroying the rest. On the contrary, we think that the intent of Congress is that these various groups of regulations, as well as particular provisions of each group, should be regarded as separable so that, if any such group or provision should be found to be invalid, that invalidity should not extend to the remaining parts if by reason of their nature and as a practical matter they could be separately sustained and enforced.

Congress provided in § 18(f) that the Commission might bring an action to enforce compliance with the act or any rule, regulation, or order thereunder, and that upon a proper showing a permanent or temporary injunction or decree should be granted. In pursuance of that authority, the present action was brought solely to enforce the provisions of §§ 4(a) and 5. We find no basis for holding that these provisions cannot be separately enforced if they are valid and we turn to that question. In view of this conclusion as to separability, it is unnecessary to go through the statute in order to determine whether other provisions are valid or invalid, and we do not intimate that there would not be found in any event a workable system in addition to the registration sections.

[9-14] *Third.* Petitioners contend that, standing by themselves, §§ 4(a) and 5 transgress constitutional restrictions. These sections have

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three parts. Section 5(a) provides for the filing of a notification of registration. Section 5(b) makes it the duty of every registered holding company to file a registration statement, with documents and certain detailed information, within a reasonable time after registration. Section 4(a) prescribes the penalty for failure to register under § 5. As the requirement of information is in itself a permissible and useful type of regulation (*Interstate Commerce Commission v. Brimson*, *supra*; *Interstate Commerce Commission v. Goodrich Transit Co.* *supra*; *American Teleph. & Teleg. Co. v. United States*, *supra*), the question is whether the particular demand, here assailed, can be validly addressed to the defendants enjoined by the decree, and, if so, whether it exceeds constitutional limits because of the character and extent of the information sought.

The findings of the district court based upon the stipulation of facts leave no room for doubt that these defendants are engaged in transactions in interstate commerce. That they conduct such transactions through the instrumentality of subsidiaries cannot avail to remove them from the reach of the Federal power. It is the substance of what they do, and not the form in which they clothe their transactions, which must afford the test. The constitutional authority confided to Congress could not be maintained if it were deemed to depend upon the mere modal arrangements of those seeking to escape its exercise. Compare *Northern Securities Co. v. United States* (1904) 193 U. S. 197, 48 L. ed. 679, 24 S. Ct. 436. We need not now determine to

what precise extent these defendants are actually engaged in interstate commerce. It is enough that they do have continuous and extensive operations in that commerce, and Congress cannot be denied the power to demand the information which would furnish a guide to the regulation necessary or appropriate in the national interest. Regulation is addressed to practices which appear to need supervision, correction, or control. And to determine what regulation is essential or suitable, Congress is entitled to consider and to estimate whatever evils exist.

Congress has set forth in the act what it considers to be the factual situation and the need of Federal supervision. The following statement is found in par. (a) of § 1 (15 USCA § 79a):

"Public utility holding companies and their subsidiary companies are affected with a national public interest in that, among other things, (1) their securities are widely marketed and distributed by means of the mails and instrumentalities of interstate commerce and are sold to a large number of investors in different states; (2) their service, sales, construction, and other contracts and arrangements are often made and performed by means of the mails and instrumentalities of interstate commerce; (3) their subsidiary public utility companies often sell and transport gas and electric energy by the use of means and instrumentalities of interstate commerce; (4) their practices in respect of and control over subsidiary companies often materially affect the interstate commerce in which those companies engage; (5) their activities extending over many states are not sus-

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ceptible of effective control by any state and make difficult, if not impossible, effective state regulation of public utility companies."

Congress has further declared in par. (b) of that section, upon the basis of facts disclosed by the reports of the Federal Trade Commission and of the Committee on Interstate and Foreign Commerce of the House of Representatives, and otherwise ascertained, the circumstances in which the national interest and the interest of investors and consumers may be adversely affected by the operation of public utility holding companies. And after this catalog of the abuses which may exist in the circumstances described, Congress declares it to be its policy "to meet the problems and eliminate the evils as enumerated in this section, connected with public utility holding companies which are engaged in interstate commerce or in activities which directly affect or burden interstate commerce." Without attempting to state the limits of permissible regulation in the execution of this declared policy, we have no reason to doubt that from these defendants, with their highly important relation to interstate commerce and the national economy, Congress was entitled to demand the fullest information as to organization, financial structure, and all the activities which could have any bearing upon the exercise of congressional authority. The regulation found in § 5(b) goes no further than to require this information and we are of the opinion that its validity must be sustained.

Section 4(a) prescribes the penalty for failure to register under § 5, and that section as an incident to registra-

tion imposes the duty to file the described registration statement. Treating the requirements of §§ 4(a) and 5 as a separable part of the act, the question is whether that penalty may be validly imposed.

In the imposition of penalties for the violation of its rules, Congress has a wide discretion. Sanctions may be of various types. See *Helvering v. Mitchell* (1938) 303 U. S. —, 82 L. ed. —, 58 S. Ct. 630. They may involve the loss of a privilege which would otherwise be enjoyed. *Id.* Note 2. When Congress lays down a valid rule to govern those engaged in transactions in interstate commerce, Congress may deny to those who violate the rule the right to engage in such transactions. *Champion v. Ames* (1903) 188 U. S. 321, 47 L. ed. 492, 23 S. Ct. 321; *United States ex rel. Attorney General v. Delaware & H. Co.* (1909) 213 U. S. 366, 415, 53 L. ed. 836, 29 S. Ct. 527; *Brooks v. United States* (1925) 267 U. S. 432, 436, 69 L. ed. 699, 45 S. Ct. 345, 37 A.L.R. 1407; *Gooch v. United States* (1936) 297 U. S. 124, 80 L. ed. 522, 56 S. Ct. 395; *Kentucky Whip & Collar Co. v. Illinois C. R. Co.* (1937) 299 U. S. 334, 346, 81 L. ed. 270, 57 S. Ct. 277. And while Congress may not exercise its control over the mails to enforce a requirement which lies outside its constitutional province, when Congress lays down a valid regulation pertinent to the use of the mails, it may withdraw the privilege of that use from those who disobey. *Champion v. Ames*, *supra*; *Lewis Publishing Co. v. Morgan*, *supra*.

In the instant case, the penalty attaches to the use of the instrumentalities of commerce and of the mails by

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those who, engaged in that use, refuse to submit to § 5 and thus through registration and the statement which is incident to registration to supply the information which Congress is entitled to demand, and has demanded, with respect to their organization and practices. Each one of the paragraphs of § 4(a), as related to the requirements of § 5, is addressed to those in that class. We think that the imposition of such a penalty does not transgress any constitutional provision.

The decree enforces this penalty by injunction as the act itself authorizes. Section 18(f). The terms of the injunction follow closely the provisions of § 4(a) and do not extend beyond them. To escape the penalty and the enforcing provisions of the decree, all that the defendants have to do is to register with the Commission and assume, under § 5, the obligation to file the described registration statement. All their rights and remedies with respect to other provisions of the statute remain without prejudice. Their objections to the affirmative provisions of the decree are untenable.

[15] *Fourth.* The district court did not err in dismissing the cross-bill. Defendants are not entitled to invoke

the Federal Declaratory Judgment Act in order to obtain an advisory decree upon a hypothetical state of facts. See *New Jersey v. Sargent* (1926) 269 U. S. 328, 70 L. ed. 289, 46 S. Ct. 122; *United States v. West Virginia* (1935) 295 U. S. 463, 79 L. ed. 1546, 55 S. Ct. 789; *Ashwander v. Tennessee Valley Authority* (1936) 297 U. S. 288, 324, 80 L. ed. 688, 56 S. Ct. 466; *Anniston Mfg. Co. v. Davis* (1937) 301 U. S. 337, 355, 81 L. ed. 1143, 57 S. Ct. 816. By the cross-bill, defendants seek a judgment that each and every provision of the act is unconstitutional. It presents a variety of hypothetical controversies which may never become real. We are invited to enter into a speculative inquiry for the purpose of condemning statutory provisions the effect of which in concrete situations, not yet developed, cannot now be definitely perceived. We must decline that invitation. *Anniston Mfg. Co. v. Davis*, *supra*.

The decree is affirmed.
Affirmed.

Mr. Justice McReynolds dissents.

Mr. Justice Cardozo and Mr. Justice Reed took no part in the consideration and decision of this case.

UNITED STATES CIRCUIT COURT OF APPEALS

UNITED STATES CIRCUIT COURT OF APPEALS, SECOND CIRCUIT

Consolidated Edison Company of New
York, Incorporated et al.

v.

National Labor Relations Board

(— F. (2d) —.)

Interstate commerce, § 1 — Powers of Congress — Local utility — Effect of activities on interstate commerce.

1. Congress has power to legislate with respect to local utilities if disruption of their service would have a direct effect upon interstate commerce, p. 480.

Labor, § 2 — National Labor Relations Act — Scope.

2. The National Labor Relations Act, 29 USCA, was intended to exert Federal power under the commerce clause to the full extent of constitutional limits, p. 480.

Interstate commerce, § 83 — Jurisdiction of Federal Board — Local public utilities — Effect of operations on interstate commerce.

3. The effect of a disruption of service of local public utilities by an industrial labor dispute would be of such magnitude and so immediate that the utilities are within the jurisdiction of the National Labor Relations Board, even though only a small percentage of their total business is used in interstate or foreign commerce, when the utilities use large quantities of raw materials originating outside the state and numerous customers, including railroads, are engaged in interstate or foreign commerce, p. 480.

Constitutional law, § 20 — Due process — Hearing — National Labor Relations Board.

4. The court cannot say that public utility companies subject to the jurisdiction of the National Labor Relations Board have been deprived of a full and fair hearing according to due process of law by the Board's direction that a complaint against the companies alleged unfair labor practices be transferred from a trial examiner to itself, with the result that the trial examiner has made no intermediate report as contemplated by a rule of the Board and the companies had no opportunity to file exceptions to his report as contemplated by another rule, and with the further result that findings of fact have been made by persons who did not see the witnesses, although this procedure is not one likely to inspire confidence in the impartiality of the proceeding and the court does not commend such procedure, p. 484.

Constitutional law, § 20 — Due process — Hearing — Oral argument or brief.

5. The National Labor Relations Board, in order to accord a full and fair hearing according to due process of law, is not bound to hear oral argument if it prefers to take a brief in a case involving a complaint against alleged unfair labor practices of public utility companies, p. 484.

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Evidence, § 21 — Hearsay — Admissibility — National Labor Relations Board.

6. Hearsay evidence is admissible in hearings before the National Labor Relations Board, p. 484.

Constitutional law, § 20 — Due process — Hearing — Hearsay evidence.

7. Whether some of the hearsay evidence introduced in a proceeding before the National Labor Relations Board was too remote to be entitled to credence goes to the correctness of the Board's findings rather than to the constitutional validity of the proceedings, p. 484.

Parties, § 16 — Necessary parties — Proceeding before Labor Board — Union.

8. A labor union with which public utility companies have contracted is not a necessary party to a proceeding on complaint to the National Labor Relations Board by another union alleging unfair labor practices on the part of the companies when the order of the Labor Board does not run against the first union, since its presence was not necessary to enable the Board to determine whether the act had been violated or to make an appropriate order against the companies, p. 485.

Labor, § 9 — Union — Order invalidating contracts.

9. A conclusion by the National Labor Relations Board that, in order to establish conditions for the exercise of an unfettered choice of representatives by employees of public utility companies, the companies should be ordered to cease and desist from giving effect to contracts entered into with one labor union, was held not to be so unwarranted as to necessitate deleting from the Board's order a clause invalidating such contracts, although on complaint by a rival union against alleged unfair labor practices the Board had dismissed a charge under § 8 (2) of the National Labor Relations Board, which forbids an employer to dominate or interfere with the formation or administration of any labor organization or contribute financial or other support to it, and had found no reason for disestablishing the first union, p. 486.

Appeal and review, § 28.8 — Decision of Federal Labor Board — Conclusions of fact.

10. The question for the court, in reviewing a determination by the National Labor Relations Board, that public utility companies have discharged employees because of union activities, contrary to § 8 (3) of the National Labor Relations Act, is not whether the court would have reached the same conclusion as the Board but whether there is evidence to support the Board's findings, p. 486.

Appeal and review, § 56 — Grounds for reversal — Exclusion of evidence — Effect of failure to apply to court.

11. An order of the National Labor Relations Board requiring a public utility company to reemploy an employee found by the Board to have been improperly dismissed for labor activities, in violation of provisions of the National Labor Relations Act, should not be reversed on the ground that the Board unreasonably and arbitrarily denied leave to the company to introduce certain evidence as to the circumstances surrounding his discharge if the company has not applied to the court for the taking of additional evidence as it might under § 10 (e) of the act, p. 487.

[March 14, 1938.]

UNITED STATES CIRCUIT COURT OF APPEALS

PETITION for review of cease and desist order of National Labor Relations Board directed against local public utility company and answers by Board praying for enforcement of its order; order entered for enforcement of Board's order. For decision by Board, see 22 P.U.R.(N.S.) 401.

APPEARANCES: Whitman, Ransom, Coulson & Goetz, for Consolidated Edison Company et al., Petitioners; William L. Ransom, Wesley A. Sturges, and Pincus M. Berkson, of Counsel; Isaac Lobe Straus, Claude A. Hope and Delafield, Thorne & Marsh, for International Brotherhood of Electrical Workers et al., petitioners. Charles Fahy, General Counsel, Robert B. Watts, Associate General Counsel, Laurence A. Knapp, Samuel Edes, and H. Gardiner Ingraham, Attorneys, for respondent; Louis B. Boudin, for United Electrical and Radio Workers of America, C.I.O. intervener; James J. O'Brien filed a brief as amicus curiae.

Before Manton, Swan, and Augustus N. Hand, Circuit Judges.

SWAN, Circuit Judge: In May, 1937, United Electrical and Radio Workers of America, Local 1212, a labor organization which we shall call United, filed with the National Labor Relations Board a charge that Consolidated Edison Company of New York and its affiliated companies (together referred to as petitioners) were engaging in unfair labor practices. On May 12th the Board issued its complaint against the petitioners. Appearing specially, they challenged the Board's jurisdiction, and moved that the jurisdictional question be decided prior to hearings on the merits. This request was denied. The petitioners

then answered, reserving their jurisdictional objections, and hearings were had before a trial examiner designated by the Board. Before the trial examiner had made findings of fact or filed a report, the case was transferred to the Board. On November 10, 1937 (22 P.U.R.(N.S.) 401), the Board issued a cease and desist order based on its finding of violations of §§ 8(1) and (3) of the National Labor Relations Act (29 USCA § 158). Pursuant to § 10(f), 29 USCA § 160(f), the petitioners brought the order to this court for review. A similar petition for review was also filed by the International Brotherhood of Electrical Workers and numerous local unions (together referred to as the Brotherhood). The Brotherhood is affiliated with the American Federation of Labor, while United is connected with the Committee for Industrial Organization. The Brotherhood had not intervened before the Board but regards itself as a "person aggrieved" by provisions of the order which affect it. In its answers to the petitions the Board prays for enforcement of its said order. United has appeared as an intervener in support of the Board's order.

[1-3] The first question to be considered is that of the Board's jurisdiction. Section 10(a) of the act, 29 USCA § 160(a), empowers the Board "to prevent any person from

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engaging in any unfair labor practice (listed in § 8) affecting commerce." The terms "commerce" and "affecting commerce" are defined in § 2(6) and (7), 29 USCA § 152. It is not contended that the petitioners are themselves engaged in commerce as so defined. They are local public utility corporations and their production and distribution of electricity, gas, and steam are carried on solely within the city of New York and adjacent Westchester county. The contention of Federal jurisdiction over the labor relations of such employers is rested upon the argument that an interruption of their business by an industrial labor dispute would vitally affect commerce, because (1) in producing electric energy, gas, and steam they use large quantities of raw materials originating outside the state of New York, and (2) some of their customers are engaged in interstate or foreign commerce or are instrumentalities of such commerce.

The facts are not in dispute; they were stipulated in great detail. A brief summary will suffice for present purposes. Consolidated Edison Company of New York is both an operating and a holding company; it owns between 90 and 100 per cent of the voting stock of each of six affiliates, its copetitioners. The parent corporation and each of its subsidiaries, with one exception, is a public utility company within the meaning of the Public Service Law of New York and is subject to regulation by the state Commission. The one exception is Consolidated Telegraph and Electrical Subway Company, which maintains and leases to others of the petitioners space in subsurface ducts.

The petitioners' labor relations are also subject to state regulation under a recent statute (Chap. 443, Laws of 1937), unless jurisdiction of the state labor relations board must yield to that of the National Board. The petitioners are operated as a unitary system. A few figures will indicate the magnitude of the system's business. In 1936 it supplied 97.5 per cent of all electric energy sold in New York city, and practically 100 per cent of that sold in Westchester county; it supplied 55.3 per cent of the total gas sold in New York city and is the only utility supplying gas in Westchester county. It is the only central-station steam utility in New York city. Its employees number more than 40,000 and its total payroll in 1936, including annuities and separation allowances, was nearly \$82,000,000. It used almost 5,000,000 tons of coal and more than 114,000,000 gallons of oil in the year 1936. All of the oil and all but an insignificant portion of the coal moved to the petitioners' plants from states other than New York. The out-of-state purchases are made from independent dealers and are delivered by independent carriers. Although the bulk of the petitioners' business, in respect to both the quantity of service and the number of consumers, is supplying electricity and gas for residential and local commercial uses, they also have numerous consumers who are engaged in interstate or foreign commerce. The most striking illustrations of this class of consumers are the railroads. Thus, electric energy supplied to the New York Central, the New York, New Haven and Hartford, and the Hudson and Man-

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hattan is used for the lighting and operation of their passenger and freight terminals and for the movement of interstate trains; and steam supplied to the Pennsylvania Railroad Company is used to operate switches in its tunnel under the Hudson river.

The construction and validity of the National Labor Relations Act was extensively discussed in *National Labor Relations Board v. Jones & L. Steel Corp.* (1937) 301 U. S. 1, 81 L. ed. 893, 57 S. Ct. 615, 108 A.L.R. 1352. As the Chief Justice there pointed out, the act does not impose collective bargaining upon all industry regardless of effects upon interstate or foreign commerce. It purports to reach only what may be deemed to obstruct or burden such commerce. At page 37 the opinion states:

"Although activities may be intrastate in character when separately considered, if they have such a close and substantial relation to interstate commerce that their control is essential or appropriate to protect that commerce from burdens and obstructions, Congress cannot be denied the power to exercise that control. *Schechter Poultry Corp. v. United States* (1935) 295 U. S. 495, 79 L. ed. 1570, 55 S. Ct. 837, 97 A.L.R. 947. Undoubtedly, the scope of this power must be considered in the light of our dual system of government and may not be extended so as to embrace effects upon interstate commerce so indirect and remote that to embrace them, in view of our complex society, would effectually obliterate the distinction between what is national and what is local and create a completely

centralized government. *Id.* The question is necessarily one of degree."

Consistently with these principles it can scarcely be doubted that the labor disputes of a local merchant will not normally fall within the Board's jurisdiction, even though some part of his stock in trade originates outside the state or some of his local customers are engaged in interstate commerce. In such a case the closing of the merchant's store by a strike of his employees would undoubtedly affect interstate commerce, but the effects would be too remote and indirect to bring his activities within the range of Federal regulation. We need not say whether the same conclusion would follow if the merchant's importations from without the state ran into figures comparable to the petitioners' importations of coal and oil. Nor need we decide whether their importations of raw materials are alone enough to bring them under the Board's jurisdiction. It is the use which some of their customers make of the electric energy and steam purchased from the petitioners, that furnishes the Board its main ground for claiming jurisdiction. The petitioners argue that they should not be chargeable for the independent acts of customers whom, by state law, they are compelled to serve. But the problem is not to be approached from the standpoint of vicarious liability. It is to be approached as a question of fact, namely, what will be the result upon commerce of a labor dispute between the petitioners and their employees. Should such a dispute result in interrupting the petitioners' service, the effects upon commerce would be catastrophic. We mention only

some of them. Instantly, the terminals and trains of three great interstate railroads would cease to operate; interstate communication by telegraph, telephone, and radio would stop; lights maintained as aids to navigation would go out, and the business of interstate ferries and of foreign steamships, whose docks are lighted and operated by electric energy, would be greatly impeded. Such effects we cannot regard as indirect and remote.

It is true that the local consequences of a cessation of the petitioners' services would be equally, if not more, disastrous. It is argued that considerations of the health, safety, and convenience of the millions of people who live and work in New York city outweigh the national interest in protecting interstate commerce from disruption; that local public utilities have always been regarded as exclusively within the jurisdiction of the states, and that to extend the Federal jurisdiction to include them is to obliterate pro tanto our dual system of government, contrary to the admonition of the Chief Justice in the *Jones & Laughlin Case*, *supra*. We are not unmindful of the persuasive force of these arguments. Nevertheless, we cannot doubt the power of Congress to legislate with respect to local utilities the disruption of whose service would have a direct effect upon interstate commerce; *cf.* *Appalachian Electric Power Co. v. National Labor Relations Board* (1938) 93 F. (2d) 985; nor can we doubt that the act under consideration was intended to exert Federal power under the commerce clause to the full extent of constitutional limits. This is not to

say that all utilities are within the act. "The question is necessarily one of degree." In the case at bar the effect of disrupting service would be of such magnitude and so immediate, that we think the petitioners are within the Board's jurisdiction, even though only a small percentage of their total business is used in interstate or foreign commerce.

None of the Labor Board cases decided by the Supreme Court has presented a situation like that at bar. In three of them the Board's order ran against an employer whose business, though local in respect to manufacturing, was plainly interstate in respect to sales of a very large percentage of its manufactured product. *National Labor Relations Board v. Jones & L. Steel Corp.* *supra*; *National Labor Relations Board v. Fruehauf Trailer Co.* (1937) 301 U. S. 49, 81 L. ed. 918, 57 S. Ct. 642; *National Labor Relations Board v. Friedman-Harry Marks Clothing Co.* (1937) 301 U. S. 58, 81 L. ed. 921, 57 S. Ct. 645. In one case the employer was engaged in a business of interstate communication (*Associated Press v. National Labor Relations Board* [1937] 301 U. S. 103, 81 L. ed. 953, 57 S. Ct. 650); in others the business was interstate transportation of passengers. *Washington, V. & M. Coach Co. v. National Labor Relations Board* (1937) 301 U. S. 142, 81 L. ed. 965, 57 S. Ct. 648; *National Labor Relations Board v. Pennsylvania Greyhound Lines* (1938) 302 U. S. —, 82 L. ed. —, 58 S. Ct. 571; *National Labor Relations Board v. Pacific Greyhound Lines* (1938) 302 U. S. —, 82 L. ed. —, 58 S. Ct. 577. We recognize that these cases

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are not decisive of the case at bar, but we think that the principles they have announced point to the conclusion we have reached.

[4-7] The petitioners contend that the Board denied them a full and fair hearing according to due process of law. This complaint is based upon four grounds. The first relates to the Board's direction that the proceeding be transferred to it pursuant to Rule 37. The result was that the trial examiner made no intermediate report, as contemplated by Rule 32, and the petitioners had no opportunity to file exceptions to his report as contemplated by Rule 34. Nor were they accorded oral argument before the Board, although it must be presumed that their brief submitted to the trial examiner came to the Board's attention. This procedure is not one likely to inspire confidence in the impartiality of the proceedings. It results in the findings of fact being made by persons who did not see the witnesses—a matter which may have far-reaching consequences in view of the very limited power conferred upon the courts to review the Board's findings of fact. But, though we do not commend such procedure, we cannot say that it has deprived the petitioners of due process of law. It is familiar practice for a court to decide issues on testimony wholly taken by deposition; and § 10(c) of the act places upon the Board the duty of stating its findings of fact "upon all the testimony taken." Nor do we think the Board is bound to hear oral argument if it prefers to take a brief. *Morgan v. United States* (1936) 298 U. S. 468, 80 L. ed. 1288, 56 S. Ct. 906; presented a very different situation.

22 P.U.R. (N.S.)

The second ground of complaint is that the trial examiner permitted amendments, thereby introducing issues which necessitated the presence of an absent party, namely, the Brotherhood. As will appear from subsequent discussion, we do not regard the Brotherhood as a necessary party.

The third ground relates to the examiner's refusal to accept testimony relating to the petitioners' reasons for discharging an employee named Solosy. This will also be discussed later.

Finally, complaint is made that remote hearsay dominated the testimony. This court has already ruled that hearsay is admissible in hearings before the Board. *Remington-Rand v. National Labor Relations Board*, February 14, 1938 (C. C. A. 2). Whether some of the hearsay was too remote to be entitled to credence, goes to the correctness of the Board's findings rather than to the constitutional validity of its proceedings. For the foregoing reasons the petitioners' contention that they have been denied due process of law is overruled.

We pass now to the merits of the controversy. The Board's findings of fact, conclusions of law, and order are too voluminous to be incorporated in this opinion. The complaint, as amended, charged the petitioners with the following unfair labor practices: (1) the use of undercover operatives to spy upon union activities of employees, in violation of § 8(1); (2) the discriminatory discharge because of union activities of six employees, in violation of § 8(3); and (3) coercion of their employees in their right to form labor organizations of their own choosing in violation of § 8(1)

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and (2). The Board sustained the charges based on §§ (1) and (3) but dismissed the charge based on § 8(2).

The most important of the charges is the one referring to coercing the employees into joining the Brotherhood. In the latter part of 1933 and the early part of 1934 the petitioners sponsored and assisted in the formation of certain Employee Representation Plans among their employees. They were company-dominated unions. Immediately after the validity of the National Labor Act was sustained by the Supreme Court, Carlisle, who was in charge of the petitioners' labor policy, conferred with Tracy, the international president of the Brotherhood, and on April 16, 1937, Tracy wrote him a letter demanding recognition of the Brotherhood as the representative of its members, and sending a proposed contract. On April 20, Carlisle called a meeting of the chairmen of all the general councils of the Plans and announced that the management could no longer continue financial support to the Plans, but had decided to recognize the Brotherhood. He said that the employees were expected to join the Brotherhood and he referred to it as the "sole bargaining body" for employees of Consolidated Edison Company. On the same date Carlisle replied to Tracy's letter, agreeing to recognize the Brotherhood and to negotiate contracts with it, although at this time the number of its members among the petitioners' employees was insignificant. Shortly thereafter there were set up seven Brotherhood locals, most of the officers of the Plans becoming officers of the locals. During the same period United was endeavor-

ing to gain members among the petitioners' employees. An officer of United wrote Carlisle for a conference, but no answer was made to this letter. Without specifying further details it will suffice to say that there was ample evidence to support the Board's finding that the petitioners exerted pressure on their employees to join the Brotherhood, while they discouraged membership in United. Between May 28th and June 16th, they entered into substantially similar contracts with the seven locals of the Brotherhood. The contracts were introduced by the petitioners in support of a contention that the issue of coercion of employees was thereby rendered moot. The contracts in terms recognized the Brotherhood as the representative of its members and were applicable only to such members. As of June 29, 1937, their membership was 30,000 out of 38,000 eligible employees. Paragraph 1(f) of the order under review directs the petitioners to cease and desist from "giving effect to their contracts with" the Brotherhood. Strenuous objection to this provision of the order is made both by the petitioners and by the Brotherhood.

[8] They both urge that the Brotherhood was a necessary party to the proceeding if the Board's order is to invalidate these contracts. This contention has been authoritatively determined against them by the recent decision of the Supreme Court. *National Labor Relations Board v. Pennsylvania Greyhound Lines* (1938) 302 U. S. —, 82 L. ed. —, 58 S. Ct. 571. The order does not run against the Brotherhood. Its presence was not necessary to enable the Board to

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determine whether the act had been violated or to make an appropriate order against the petitioners.

[9] It is not so clear, however, that invalidating the contracts is an appropriate order against the petitioners. Unlike the Greyhound Case, the Board has here dismissed the charge under § 8(2), 29 USCA, § 158, which forbids an employer "To dominate or interfere with the formation or administration of any labor organization or contribute financial or other support to it." Since the Brotherhood is not dominated, supported, or interfered with by the petitioners, it is not immediately obvious that the employees' right to self-organization will be injured by allowing the contracts to be carried out. Under them, the Brotherhood acts only for its own members, and clause 1(g) of the order restrains the petitioners from recognizing it as the exclusive representative of their employees. Other subdivisions, namely 1(a), (b), (c), (d), (e), and (h), restrain them from urging their employees to join any labor organization, or interfering with their free exercise of self-organization, or favoring the Brotherhood or any other labor organization. Under these provisions the employees will have complete freedom to join United in preference to the Brotherhood, or to join neither. But the Board concluded that "in order to establish conditions for the exercise of an unfettered choice of representatives" by the petitioners' employees, the petitioners should be ordered to cease and desist from giving effect to the contracts. We do not think that this conclusion is so unwarranted as to necessitate deleting clause (f) from

the order. However, since the Board has found no reason for "disestablishing" the Brotherhood, as was done in the Greyhound Case, it would seem to be entirely lawful for the petitioners and the Brotherhood to make new contracts on behalf of its own members, once the employees have been notified that the old contracts are not binding and that they are free to join or refrain from joining any labor organization; and the new contracts may be on the same terms as the old. We see nothing in the order to prevent that.

[10] The Board has found that the petitioners discharged six employees because of their union activities contrary to § 8(3) of the act. Three of the men were discharged November 29, 1935, and two on June 19, 1936. All five were officers or active leaders of Local 103 of the Brotherhood of Utility Employees, which later became affiliated with United. The petitioners presented testimony that these men were discharged because it was necessary to reduce the size of two departments in which they worked; that in making such reductions preference was given to married employees; and that these men were single and were treated no differently than others, both union and nonunion, who were laid off about at the same time. The Board rejected this explanation chiefly, it would seem, because other single men with less seniority of service were retained. The question is not whether this court would have reached the same conclusion as the Board, but whether there is evidence to support the Board's findings. Section 10(d). We cannot say that the record is wholly barren

of evidence to support the charge that they were discriminated against on account of union activities. Hence the order requiring that they be reinstated and made whole for losses sustained by reason of their discharges must stand. This does not mean that the petitioners must employ these five men in addition to their present employees, if the work to be done does not require additions to their force, for the petitioners are at liberty to discharge an equal number of other employees for proper reasons.

[11] The sixth discharge complained of is that of Solosy, who was laid off January 17, 1936. The reason given him was the shutting down of the "A" plant of the Astoria Light, Heat & Power Company. It was in fact shut down. Other employees in his division, of less seniority, were retained. In his case, also, the Board found that in reality his discharge was because of his union activity. Solosy's case differs from the others in that the petitioners were not allowed to introduce certain evidence as to the circumstances surrounding his discharge. This situation arose

as follows: The Board unexpectedly completed its proof on June 24, 1937. Counsel for the petitioners was unready to go on and obtained a continuance in order that Messrs. Carlisle and Dean, who were absent from the city, might testify on July 6th. The examiner and the Board (by letter) declined to let any other witnesses testify on that date. Counsel offered two of Solosy's supervisors to testify to the reasons for his discharge and to the fact that the men who were retained in preference to him were better educated and better trained. These witnesses were at hand, their testimony would have been short and would have entailed no appreciable delay in closing the hearings. It was vital testimony on the issue of the petitioners' motive in discharging him. Denial of leave to introduce it appears to us unreasonable and arbitrary. However, the petitioners have not applied to this court for the taking of additional evidence, as they might under § 10(e).

An order of this court may be entered for enforcement of the Board's order.

NORTH CAROLINA UTILITIES COMMISSION

Re Tide Water Power Company

Labor, § 10 — Pension plan — Commission approval.

The Commission approved a pension plan for employees of a power company, providing for the contribution or depositing by the company of funds under a pension trust agreement, which deposits were to be irrevocable and which, in accordance with the terms of the trust agreement and the pension plan, would be used to purchase annuity insurance for such employees as might qualify under the plan, no deposits or payments to be made by employees and the entire cost to be borne by the employer.

[March 2, 1938.]

NORTH CAROLINA UTILITIES COMMISSION

APPPLICATION for approval of plan for pensions for employees of a public utility company; plan approved.

WINBORNE, Commissioner: This cause coming on to be heard upon application of the Tide Water Power Company for approval of a pension plan for employees of the Tide Water Power Company, and it appearing to the Commission from the printed pension plan for employees of Tide Water Power Company submitted with said application and from the pension trust agreement, dated December 14, 1937, in which Employees Welfare Association, Inc., is party of the first part, and Joseph A. Shields, trustee, is party of the second part, also submitted with said application, and that the two documents constitute a pension plan which, for general purposes, provides for the contribution or depositing by the Tide Water Power Company of funds under said pension trust agreement, which deposits are irrevocable and which, in accordance with the terms of the trust agreement and the pension plan for employees of Tide Water Power Company, will be used to purchase annuity insurance for such employees of the Tide Water Power Company as may qualify under said pension plan; and it further appearing that no deposits or payments are made under said plan by employees, the entire cost of the pension plan being borne by the employer.

The Commission, having studied the pension plan and the pension trust agreement, is of the opinion and finds as a fact that the pension plan therein and thereby set up is fair and reason-

able and adequate for the purposes of the Tide Water Power Company, and that it will not unreasonably in any manner deplete the earnings or assets of the Tide Water Power Company, but will, on the contrary, by the improvement of working conditions and better relations between employer and employees, tend strongly to be of much benefit to the power company and aid and assist it in the discharge of its public service and will require only such expenditure as will be compatible with public interest and necessary and appropriate for or consistent with the proper performance by the utility of its service to the public as such utility and will not impair its ability to perform that service and is reasonably necessary and appropriate therefor.

It is, therefore, *ordered and adjudged* that the pension plan of the Tide Water Power Company, as set forth in the pension plan for employees of the Tide Water Power Company, and the pension trust agreement, dated December 14, 1937, in which Employees Welfare Association, Inc., is party of the first part and Joseph A. Shields, trustee, is party of the second part, copies of both of which are on file in this office, be and the same are in all respects approved, and the Tide Water Power Company is hereby authorized to set up said pension plan and operate the same in accordance with the provisions of said instruments.

East Ohio Gas Company
v.
Public Utilities Commission of Ohio
City of Akron
v.
Public Utilities Commission of Ohio

[No. 26478.]

(— Ohio St. —, 12 N. E. (2d) 765.)

Appeal and review, § 49 — Commission decision — Rates — Confiscation — Rate base.

1. The provisions of § 499-9, General Code, require that property, other than land, of a public utility be valued by deducting "the sum of the amounts of depreciation from the sum of the new reproductive costs" as of the date of the investigation. It is the duty of this court upon a review of orders of the Public Utilities Commission not only to determine whether lawful rules were applied by the Commission, but also to decide whether, upon the record, the orders made were against the weight of the evidence or resulted in confiscation of property, p. 493.

Valuation, § 405 — Findings by Commission — Basis in evidence.

2. Where in fixing valuations of a gas producing and selling company the Commission adopted some views of each side and also made separate findings of fact, such procedure is not unlawful or unreasonable provided its independent judgment was based on evidence in the record and was not against the weight of the evidence, p. 493.

Return, § 40 — Basis — Consideration of future.

3. A rate of return must be based not only on the valuation, revenue, and expenses provided in § 499-9, General Code, but must likewise provide for a reasonable return in the immediate future; p. 493.

Appeal and review, §§ 39, 52 — Commission decision — Valuation — Depreciation.

4. Methods of the Commission in ascertaining valuations and depreciation will not be disturbed if they are fair and opportunity to challenge their reasonableness upon review is provided, p. 493.

Depreciation, § 10 — Annual allowance — Purpose.

5. Annual allowances of depreciation are made for the purpose of maintaining the property in a normal operating condition, and to equalize the costs of retirements and replacements, p. 497.

OHIO SUPREME COURT

Valuation, § 331 — Going concern value — Proof.

6. An allowance for going concern value should not be made upon remote assumptions and speculations and without proof of any intrinsic worth not included in other property valued, p. 498.

Expenses, § 109 — Taxes — Basis for allowance.

7. An order permitting only such deductions for taxes as are based upon the amounts appearing on the books of the company during a test period, is unlawful and unreasonable when the evidence discloses that the rate of taxation was higher in years subsequent to the test period, p. 498.

Expenses, § 49.1 — Stock purchase by employees — Company assistance.

8. Under a plan whereby a public utility company expends sums to enable its employees to purchase stock in the parent company, if the plan is a fair one and if the employee treats the expenditures for his benefit as part of his compensation, such sums are to be considered operating expenses, p. 499.

Return, § 101 — Natural gas utility.

9. A finding by the Commission that a return of $6\frac{1}{2}$ per cent for a gas producing and gas selling company, during the years from 1933 to 1937, is fair and reasonable, will not be disturbed if supported by the evidence, p. 500.

Expenses, § 137 — Natural gas utility — Delay rentals.

10. Delay rentals paid by a producing gas company to keep alive leases of gas land held in reserve should not be charged to operating expenses when an annual amortization allowance makes provision whereby new leases can be acquired and paid out of current earnings, p. 502.

Expenses, § 5 — Powers of Commission — Payments to affiliate — Gas purchases.

11. Where a gas company purchases a portion of its supply from an affiliated producer and seller, the Commission may inquire whether the contract price of sale is fair and reasonable. Not only can inquiry be made of the valuation, revenues, and expenses of the affiliated company, but evidence of the market price of gas at the place of sale and delivery is also relevant to determine whether the contract price is reasonable, p. 503.

Expenses, § 92 — Legal expense in rate case — Amortization.

12. Legal expenses of a gas company, in resisting a rate on the ground that it is confiscatory, may be amortized as part of its operating expenses when the evidence produced resulted in a finding that the rate proposed was unreasonable and unlawful, p. 506.

Appeal and review, § 69 — Remand to Commission — Rate order.

13. Where the court determines that certain findings of the Public Utilities Commission are unreasonable and unlawful while others were properly made, and from the record the court is unable to substitute specific findings for those improperly made by the Commission, it is the duty of the court to remand the proceedings to the Commission, as a fact-finding body, with instructions to carry out the rulings of the court and correct the findings which were found to be unreasonable and unlawful, p. 507.

(MYERS, J., concurs in separate opinion.)

[January 26, 1938.]

Headnotes by the Court.

EAST OHIO GAS CO. v. PUBLIC UTILITIES COMMISSION OF OHIO

A PPEALS from Commission order fixing rates for natural gas service; reversed and remanded. For Commission decision, see 17 P.U.R.(N.S.) 433.

The matters are before this court upon separate appeals by the East Ohio Gas Company and the city of Akron from an order of the Public Utilities Commission of Ohio fixing rates for the consumption of gas in the city of Akron during a 4-year period from May 19, 1933, to May 19, 1937.

On May 17, 1932, the city of Akron adopted a rate ordinance providing for an average return of approximately 65 cents per thousand cubic feet which was accepted by the East Ohio Gas Company. This ordinance did not expire until June 30, 1936, but by its provisions either party could terminate it upon six months' notice.

On November 8, 1932, the electors of the city of Akron adopted an initiated ordinance which directed the city to give the notice of six months required to terminate the ordinance of May 17, 1932. This initiated ordinance fixed a rate of 63 cents for the first thousand cubic feet or less, or none, per month, and 45 cents per M.c.f. for all gas consumed over that amount, which would have produced an average return of 50 cents per M.c.f.

It was from the provisions of this ordinance that the East Ohio Gas Company appealed to the Public Utilities Commission, contending that the rates so fixed were unlawful, unjust, and unreasonable and insufficient to produce a fair return for the company.

Hearings were held at which it was

agreed that the date for fixing the valuation of the property of the company as provided for by §§ 499-9 and 614-46, General Code, would be December 31, 1932. Revenues and expenses were determined from the experience of the company during 1932, 1933, and 1934.

After extended hearings, on February 1, 1937 (17 P.U.R.(N.S.) 433), the Commission made its findings of fact and orders for fixing rates in the city of Akron. All three of the members of the Commission found that the rate provided for in the initiated ordinance was unreasonable and insufficient to yield a reasonable return to the company.

A majority of the Commission found that a reasonable value of the property of the company upon which the rate was to be fixed was \$6,572,708, and that a rate of return of 6½ per cent on that present value was a fair one.

Approximately half of the gas used in the city of Akron was purchased by the East Ohio Gas Company from an affiliate concern, the Hope Natural Gas Company of West Virginia. The Commission found that the contract price existing between the two companies of 38.5 cents per M.c.f. was fair and reasonable.

In determining the price, evidence of valuations and operating expenses was presented in detail. Based upon a return of 6½ per cent, a majority of the Commission found that the East Ohio Gas Company was entitled to an

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average rate of 62.35 cents per M.c.f. Accordingly, the rates found provided for 70 cents for the first 300 cubic feet or less, or none, per month, and for 50 cents per M.c.f. for all over 300 cubic feet.

In concurring in the order, Commissioner Williams stated that he was not satisfied with the disallowance of the company's claim for "going concern value" and he also felt that the company was entitled to an allowance for its stock plan deposits.

Commissioner Schaber dissented from the order, maintaining that not only was the valuation fixed excessive, but likewise a 6 per cent return was sufficient. He also stated that a fair price to be paid by the East Ohio Gas Company to its affiliate, the Hope Company, should not exceed 37.1 cents. To an allowance of \$304,000 per annum for the depletion of leaseholds and replenishing of wasting assets, he entered a dissent. In his dissent he said that the rate should be at least $2\frac{1}{2}$ cents per M.c.f. lower than that fixed by a majority of the Commission.

In presenting the appeal, the East Ohio Gas Company sets forth as alleged errors that the Commission reduced its valuation \$316,478 in valuing its distribution main and service lines; that recognition was not given to increases in value after December 31, 1932; that no allowance was made for going concern value; that only 1.5 per cent was allowed for annual depreciation other than leaseholds and gas wells instead of 2.65 per cent; that only 3.4 per cent of the gross receipts was allowed for Federal taxes instead of 14.2 per cent, that 2.96 per cent of the gross receipts should have been

allowed for state excise taxes instead of 2.26 per cent; that no consideration was given to amounts paid annually for an employees' stock acquisition plan; and that the rate of return of $6\frac{1}{2}$ per cent is unreasonable and confiscatory.

The city in its appeal itemizes 58 separate assignments of errors. While this court has reviewed each of these claims, they can be classified rather broadly. The chief complaints are that the fixing of a valuation of the company's property at \$6,572,708 is \$1,028,969 in excess of its true value; that the allowance of \$304,000 per annum for operating expenses for the depletion of wells was in effect a claim for "delay rentals"; that the fair price to be paid by the East Ohio Gas Company to the Hope Company should not have been in excess of 30 cents per M.c.f.; that allowing \$82,693 in 1932 and similar sums for depreciation of property other than leaseholds and wells was erroneous; that the entire sum of \$119,344 should not have been allowed as rate-case expenses; that the Commission should not have used the average revenues and expenses in 1932, 1933, and 1934, but should have made a separate finding for each year; that the rate of return is excessive and that the proximity of Akron to gas fields was not taken into consideration.

Both appeals were consolidated into one proceeding.

APPEARANCES: Tolles, Hogsett & Ginn, William B. Cockley, and Walter J. Milde, all of Cleveland, for appellant East Ohio Gas Co.; Wade DeWoody, Director of Law and C. B. McRae, both of Akron, Bricker, Pow-

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er & Barton, of Columbus, and Harry S. Littman, of Akron, for appellant city of Akron; Herbert S. Duffy, Attorney General, and W. W. Metcalf, of Columbus, for appellee.

GORMAN, Judge: [1-4] In this state the sole method of review from an order of the Public Utilities Commission is by an appeal to this court. New evidence is not adduced upon the appeal, but this court considers the law and facts upon the record made before the Commission. Under such circumstances, it is essential that the Public Utilities Commission conduct a fair and open hearing with suitable opportunity being given through evidence and argument to challenge the result found by the Commission. *West Ohio Gas Co. v. Ohio Pub. Utilities Commission* (1935) 294 U. S. 63, 79 L. ed. 761, 6 P.U.R.(N.S.) 449, 55 S. Ct. 316; *Id.* 294 U. S. 79, 79 L. ed. 773, 6 P.U.R.(N.S.) 459, 55 S. Ct. 324; *Ohio Bell Teleph. Co. v. Ohio Pub. Utilities Commission* (1937) 301 U. S. 292, 301-306, 81 L. ed. 1093, 18 P.U.R.(N.S.) 305, 57 S. Ct. 724, 729-731.

It is necessary for this court to review both the law applied and the evidence to ascertain whether the order was "unlawful or unreasonable." Section 544, General Code; *Lima Teleph. & Teleg. Co. v. Public Utilities Commission* (1918) 98 Ohio St. 110, P.U.R.1919A, 888, 120 N. E. 330; *St. Clairsville v. Public Utilities Commission*, 102 Ohio St. 574, P.U.R.1921E, 459, 132 N. E. 151; *Cleveland Provision Co. v. Public Utilities Commission* (1922) 104 Ohio St. 253, 135 N. E. 612, 23 A.L.R. 404; *Cleveland v. Public Util-*

ities Commission (1934) 127 Ohio St. 432, 5 P.U.R.(N.S.) 349, 189 N. E. 5.

Generally, through a long line of decisions, it has been held that if the legal rule applied by the Commission is erroneous or if the facts found are manifestly against the weight of the evidence, the order should be reversed. *Settle v. Public Utilities Commission* (1916) 94 Ohio St. 417, 419, P.U.R.1917C, 366, 114 N. E. 1036; *Pollitz v. Public Utilities Commission* (1917) 96 Ohio St. 560, 565, P.U.R.1918B, 262, 118 N. E. 107, 109; *Id.* 97 Ohio St. 191, 200, P.U.R. 1918E, 153, 119 N. E. 507, 510; *Akron, C. & Y. R. Co. v. Public Utilities Commission* (1917) 96 Ohio St. 359, 117 N. E. 314; *Hardin-Wyandot Lighting Co. v. Public Utilities Commission* (1923) 108 Ohio St. 207, 213, P.U.R.1924A, 122, 140 N. E. 779, 781; *Findlay v. Public Utilities Commission* (1924) 111 Ohio St. 827, 146 N. E. 316; *Eager v. Public Utilities Commission* (1925) 113 Ohio St. 604, P.U.R. 1926B, 644, 149 N. E. 865; *Solt v. Public Utilities Commission*, 114 Ohio St. 283, P.U.R.1926D, 636, 150 N. E. 28; *Lykins v. Public Utilities Commission* (1926) 115 Ohio St. 376, 154 N. E. 249; *Gilbert v. Public Utilities Commission* (1936) 131 Ohio St. 392, 396, 17 P.U.R.(N.S.) 205, 3 N. E. (2d) 46, 48. But in determining whether a rate is confiscatory, it is necessary for the court to examine the evidence anew and exercise its independent judgment. *Ohio Valley Water Co. v. Ben Avon*, 253 U. S. 287, 64 L. ed. 908, P.U.R.1920E, 814, 40 S. Ct. 527; *Ohio Utilities Co. v. Public Utilities Commission*, 267

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U. S. 359, 69 L. ed. 656, P.U.R.1925C, 599, 45 S. Ct. 259.

Under the provisions of § 499-9, General Code, in rate-making cases, in determining valuations the Public Utilities Commission of Ohio is directed to base such determination upon the reproduction cost new less depreciation. While under the provisions of § 499-10, General Code, consideration may be given to outstanding bonds, original capital stock, moneys received from the issue of securities, and receipts and expenditures, the legislature has rather specifically set forth rules for valuations to be followed by both the Commission and this court. Under the statutes in Ohio, relevant argument cannot be received that valuations should be based upon money prudently invested (see Brandeis, J., in *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission*, 262 U. S. 276, 289, 67 L. ed. 981, 985, P.U.R. 1923C, 193, 43 S. Ct. 544, 547, 31 A.L.R. 807) because the legislature has adopted the principle of the rule set out in *Smyth v. Ames* (1898) 169 U. S. 466, 42 L. ed. 819, 18 S. Ct. 418.

The rate under the statute is to be determined by considering the cost of reproduction of the property at present value, but, nevertheless, if it is contended that the result of such a method deprives the company of its property without due process of law contrary to the Fourteenth Amendment of the United States Constitution, the cost of construction and other evidence of the history of the utility may be offered to determine whether the rate is confiscatory. *California R. Commission v. Pacific Gas & E.* 22 P.U.R.(N.S.)

Co. (1938) 302 U. S. —, 82 L. ed. —, 21 P.U.R.(N.S.) 480, 58 S. Ct. 334. See U. S. Law Week, January 4, 1938, Index 464.

While the standard fixed is the cost of reproduction less depreciation, nevertheless for rate-making purposes only that property which is "used and useful for the convenience of the public" may be considered. Section 614-46, General Code.

In reviewing the orders in this case, the court should decide whether the revenue raised by the rates gives a yield which is "something higher than the line of confiscation." *West Ohio Gas Co. v. Ohio Pub. Utilities Commission* (1935) 294 U. S. 63, 70, 79 L. ed. 761, 6 P.U.R.(N.S.) 449, 55 S. Ct. 316. This level must be attained by giving suitable opportunity to present evidence and argument. *Southern R. Co. v. Com. ex rel. Virginia* (1933) 290 U. S. 190, 78 L. ed. 260, 4 P.U.R.(N.S.) 293, 54 S. Ct. 148.

"Unjust and unreasonable rates and confiscatory rates are by no means synonymous. A rate which would not be confiscatory in character, by reason of the amount being somewhat above the point of confiscation, yet might not be a reasonable and just rate as between the public and the owner under all the circumstances of the case." *Portsmouth v. Public Utilities Commission*, 108 Ohio St. 272, P.U.R.1923E, 834, 838, 140 N. E. 604, 606.

It is our function to determine whether the finding as to a reasonable and just rate for the city of Akron by the Commission was based upon the evidence and in accordance with the provisions of §§ 614-23 and 614-

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46, General Code, and other related statutes.

The first error claimed by the East Ohio Gas Company relates to the cost of labor for the gas distribution and service mains. The company and the city in the hearing before the Commission were able to agree upon the cost of materials for the mains, but not the cost of labor. After evidence was presented, the Commission (17 P.U.R.(N.S.) at p. 439) made the following findings:

"The items in Account 234 upon which there is no agreement are direct labor costs, top account costs, performance bond, and contractor's fee. The company's claim for these items is \$2,160,909; the city's \$1,694,701, a difference of \$466,208. The Commission must determine whether or not the company's claim is too high and if so how much and whether the city's claim is too low and if so how much. In our adjustments we have given careful consideration to each item of labor cost and with the experience we have had in adjusting such matters heretofore, we believe that the total of estimates of these items of labor cost as claimed by the parties is incorrect. We, therefore, substitute our judgment as to a correct figure for these items in the amount of \$1,908,198, which, when added to the agreed to material and paving costs, makes a total reproduction cost new of \$3,349,163 for Account 234.

"In Account 235 the items upon which there is no agreement by the parties are direct labor costs, top account costs, performance bond and contractor's fee. In this account, the company's claim for these items is

\$543,568, the city's \$327,771, a difference of \$215,797. We have adjusted these items as we did in Account 234 and find that our adjusted figure, \$412,548, is a proper allowance which, when added to the agreed to material and paving costs, makes a total reproduction cost new of \$627,531."

Expert witnesses produced by both parties testified, and the Commission in making the above finding set forth in detail costs for each single item in controversy. The company contended that the Commission accepted a number of theories propounded by witnesses of the city which were impracticable.

On the other hand, the claim is made by counsel for the city that the Commission merely made a compromise by arbitrarily adopting a figure midway between that of the company and the city without any evidence to support the finding. Such a procedure, it is said, violates the rule set forth in the case of *Ohio Bell Teleph. Co. v. Ohio Pub. Utilities Commission* (1937) 301 U. S. 292, 301, 81 L. ed. 1093, 18 P.U.R.(N.S.) 305, 57 S. Ct. 724.

If the Commission had arbitrarily adopted a figure for costs approximately half way between the prices claimed by the two parties, the result would be open to question. The record shows this was not done. There were thirty separate items of labor which comprised the matters in dispute. In some instances the Commission adopted the figures of the city while in others the valuation of the company was accepted. In many, the Commission made its own finding.

The Commission, being a fact-find-

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ing body, had in some respects the same function as a jury. It could accept any evidence it saw fit or could adopt a higher or lower figure where the record did not warrant the claim made. It could not, nor did it in this instance, take judicial notice of facts not in the record so that a review could not be had. But having evidence before it, it was justified in holding that the testimony of the experts was only partially true. *Baltimore & O. R. Co. v. United States* (1936) 298 U. S. 349, 359, 80 L. ed. 1209, 56 S. Ct. 797, 803. It was not limited in its decision to a narrow field to accept either the evidence of one side or the other.

While some of the conclusions reached by the Commission might not have been the findings of this court, we cannot say that they are either unreasonable or against the weight of the evidence. In no respect do they amount to a confiscation of property.

The Commission fixed December 31, 1932, as the date certain for the determination of the valuation under the provisions of § 499-9, General Code. The ordinance was to be in effect from May 19, 1933, to May 19, 1937. The company maintains that after December 31, 1932, there was an upward trend in valuations which was not considered by the Commission.

It will be conceded that the rates established must provide not only a reasonable rate of return at the time of investigation, but also for a reasonable time in the immediate future. *McCardle v. Indianapolis Water Co.* (1926) 272 U. S. 400, 408, 71 L. ed. 316, P.U.R.1927A, 15, 47 S. Ct. 144; *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commis-*

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sion, *supra*; *Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission*, 262 U. S. 679, 692, 67 L. ed. 1176, P.U.R.1923D, 11, 43 S. Ct. 675.

Courts will take judicial notice that there has been a depression, and that a decline in market values and cost of labor accompanied it. *Atchison, T. & S. F. R. Co. v. United States* (1932) 284 U. S. 248, 76 L. ed. 273, 52 S. Ct. 146; *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 290, 311, 78 L. ed. 1267, 3 P.U.R.(N.S.) 279, 54 S. Ct. 647. "How great the decline has been for this industry or that, for one material or another, in this year or the next, can be known only to the experts, who may even differ among themselves." *Ohio Bell Teleph. Co. v. Ohio Pub. Utilities Commission, supra*, at p. 311 of 18 P.U.R.(N.S.)

The Commission in this case did actually fix valuations for the years 1933 and 1934, and found them to be somewhat less than that of December 31, 1932, mainly due to the deductions for accrued depreciation.

The company claimed there was an increase from December 31, 1932, to December 31, 1934, of \$713,429 in its valuation. In its computation it failed to consider all of the accrued depreciation. In fact, the only actual evidence offered to show an increase in valuation was a claim that labor and material costs in Akron in December, 1934, were 10 per cent higher than on December 31, 1932.

This court will not take judicial notice of the fact that, because there was a 10 per cent increase in the price of labor two years after the date of the investigation, such increase continued

throughout the period of the ordinance. The testimony of the expert was not of such character that the Commission could have made a rational finding in reference to valuations, but would have had to base a finding on pure conjecture.

Therefore, upon the record and considering the return on the investment allowed from May 19, 1933, to the end of 1934, there was nothing in the finding of the Commission that caused confiscation. Price trends, valuations, revenues, and expenses subsequent to the date of the investigation up to December 31, 1934, were actually considered by the Commission in arriving at its conclusions.

In this connection, since this proceeding is to be remanded, if upon rehearing a claim be made that because of alleged improved economic conditions subsequent to December 31, 1934, there has been a deprivation of property without due process, it seems proper to call the attention of the Commission to the fact that such relevant evidence of actual operations must be received and the claim determined under the most recent ruling of the Supreme Court of the United States, *McCart v. Indianapolis Water Co.* (1938) 302 U. S. —, 82 L. ed. —, 21 P.U.R.(N.S.) 465, 58 S. Ct. 324. See *United States Law Week*, January 4, 1938, Index 494, 495. *Indianapolis Water Co. v. McCart* (1937) 89 F. (2d) 522, 525, 18 P.U.R.(N.S.) 279. Under such circumstances, neither estimates nor prophecy need be considered, but only figures of actual experience.

Claims are made on behalf of the city that the Commission took an average of the expenses and revenues of

the company during the years 1932, 1933, and 1934, and did not make a separate finding for each separate year. It is difficult to perceive how this was prejudicial to the city for in many instances it agreed to specific revenues and expenses determined under the method employed by the Commission. There is nothing to show that the revenues and expenses obtained by this method were not fair and reasonable as an entirety, and if not, in specific instances, sufficient data was produced to review the findings in this court.

The company asked that it be allowed an annual depreciation on its properties, exclusive of leaseholds and gas wells, of 2.65 per cent, but the Commission found a rate of 1.5 per cent for such depreciation was sufficient. It is urged that the realized accrued depreciation as carried upon the books of the company showed a rate of 2.65 per cent was necessary.

[5] Annual allowances of depreciation are made for the sole purpose of maintaining the property in a normal operating condition, and to equalize the costs of retirements and replacements from year to year. *United R. & Electric Co. v. West*, 280 U. S. 234, 253, 74 L. ed. 390, P.U.R. 1930A, 225, 50 S. Ct. 123; *Lindheimer v. Illinois Bell Teleph. Co.* (1934) 292 U. S. 151, 181, 78 L. ed. 1182, 3 P.U.R.(N.S.) 337, 54 S. Ct. 658.

An allowance for depreciation is to be made for the future as well as the past. While the history of the company's depreciation is a factor, it is not the sole one. This court, where somewhat similar facts and circumstances were presented, upheld a rul-

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ing of the Commission where annual depreciation was fixed at 1.4 per cent. There is nothing in the record in this case to cause this court to hold that the Commission's finding on this subject was either manifestly against the weight of the evidence or produced a confiscatory result. *West Ohio Gas Co. v. Public Utilities Commission* (1934) 128 Ohio St. 301, 5 P.U.R. (N.S.) 5, 191 N. E. 105; *Id.* (1935) 294 U. S. 63, 79 L. ed. 761, 6 P.U.R. (N.S.) 449, 55 S. Ct. 316.

[6] The company claims it was entitled to some allowance for going concern value. One witness testified in reference to the extensive business established, and the municipalities and consumers served by the company. He did not reach any specific conclusion as to the value in dollars of the worth of the going concern. It is submitted by the company that upon his testimony at least 10 per cent of the total valuation should have been allowed.

Whether going concern value should be considered depends upon the financial history of the company. *Houston v. Southwestern Bell Teleph. Co.* 259 U. S. 318, 66 L. ed. 961, P.U.R.1922D, 793, 42 S. Ct. 486. However, when substantial allowances for organization, interest, emergency, and other general expenses during construction are made, a specific allowance for going concern is not necessary. *Hardin-Wyandot Lighting Co. v. Public Utilities Commission*, 118 Ohio St. 592, P.U.R.1928D, 560, 162 N. E. 262.

The evidence presented by the expert was not of such a character as to furnish the Commission with an adequate basis for fixing such a valuation. It was founded almost entire-

ly upon remote assumptions and speculations without proof of any intrinsic worth not included in other property valued. The claim was therefore properly denied. *St. Joseph Stock Yards Co. v. United States* (1936) 298 U. S. 38, 80 L. ed. 1033, 14 P.U.R. (N.S.) 397, 56 S. Ct. 720.

[7] The court feels that the company has just complaint against the method used to determine amounts to be expended for both the Federal income tax and state excise tax. An allowance for the payment of Federal income taxes must be made in rate cases. *Galveston Electric Co. v. Galveston*, 258 U. S. 388, 66 L. ed. 678, P.U.R.1922D, 159, 42 S. Ct. 351; *Georgia R. & Power Co. v. Georgia R. Commission*, 262 U. S. 625, 633, 67 L. ed. 1144, P.U.R.1923D, 1, 43 S. Ct. 680, 682.

The city contended that only the actual amount of taxes to be paid during the years 1932, 1933, and 1934 as carried on the books of the company should be considered. Adopting this theory, the Commission made an allowance of 3.4 per cent per annum for Federal income taxes.

The company contends that during the ordinance period the actual rate would have been 14.2 per cent of the revenues. Whether this be true, we are unable to ascertain from the record. It can be said, however, that the rate of taxation in the years after 1935 was greater than in previous years. The Commission knew this fact at the time of its order, and to base its allowance for taxes upon a rate in past years which was lower than that which they knew would be assessed was arbitrary and unreasonable.

Then, again, at the time of the hear-

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ing the taxes of the company were in dispute. In 1934, it was claimed that due to a refund to consumers in Cleveland, no taxes were assessable. This precise situation probably would not occur in future years. It was the duty of the Commission to consider not only the taxes actually assessed during the test period, but to compute what they would be after the test period in view of the change in laws in the years. This the Commission failed to do. The finding is therefore reversed and remanded with instructions to determine the amount of taxes actually paid or which will be paid during the ordinance period and charged against the East Ohio Gas Company.

To ascertain the error in reference to the state excise tax allowance, it is hardly necessary to more than quote from the Commission's findings (17 P.U.R.(N.S.) at p. 446):

"The parties are in agreement as to the average excise tax rate for the years 1932, 1933, and 1934. East Ohio contends that although the average excise tax rate for these years was 2.26 per cent and since the ordinance period is from May 19, 1933, to May 19, 1937, the average rate for this period, 2.96 per cent should be applied to revenues considered. The city contends that actual excise taxes assignable to the respective years should be used. Economic conditions have shown improvements since December 31, 1934, and it may be assumed, therefore, that wages and other costs of operations will probably be higher for that portion of the ordinance period not considered here. For example, the Social Security Act, 42 USCA § 301 et seq., a new Federal

law, will impose, we know, additional expense during 1936 and 1937.

"On the other hand, this improvement in economic conditions may also result in increased sales for the company with resulting gains that more than offset the increased expenses of operation."

"The Commission, having considered this matter fully, is of the opinion that a proper allowance for excise taxes is an amount computed at the respective average excise tax rates for the years considered which we find to be 2.26 per cent." (Italics ours.)

Such a ruling is predicated upon a speculative assumption that neither court nor Commission can make. To withhold a complete allowance for taxes because business may improve is mere guesswork. "To prefer forecast to experience in such cases is arbitrary." (Syllabus) West Ohio Gas Co. v. Ohio Pub. Utilities Commission (1935) 294 U. S. 79, 79 L. ed. 773, 6 P.U.R.(N.S.) 459, 55 S. Ct. 324.

It being conceded that during the ordinance period the company would be called upon to pay 2.96 per cent for excise taxes, such an amount should be allowed. The finding of the Commission that only 2.26 per cent be allowed is hereby reversed, and the Commission is instructed to allow the percentage of 2.96 per cent as that actually paid. To do otherwise would be to permit admitted confiscation.

[8] The company offered evidence that it had a plan whereby it made certain expenditures to permit its employees to acquire stock of the parent company, the Standard Oil Company of New Jersey. As allocated to Ak-

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ron, there was an annual charge for this claimed by the company of \$5,800.

The Commission, in passing upon this claim, treated it too lightly. In its findings (17 P.U.R.(N.S.) at p. 445) we note:

"The Commission in the East Ohio-Cleveland Case (4 P.U.R.(N.S.) 433) rejected the item of expense 'Stock Plan Deposits.' While we feel there is much merit to the plan, nevertheless upon consideration of the facts in this case, which are not unlike the facts in the East Ohio-Cleveland Case, we do not approve its allowance."

The plan enables employees to acquire stock in the parent company, the Standard Oil Company of New Jersey. Yet it is said that no matter how laudable the plan is the consumers of Akron should not have to bear such an expense.

Certainly, today, there is a general widespread feeling that industry owes to its employees not only the negative duty of refraining from overworking or injuring them, but likewise the affirmative duty of providing them so far as possible with economic security. Expression of such views has found legislative sanction in the adoption of social security laws.

It is a much disputed question in ordinary industry whether corporate managers are trustees solely for the stockholders or whether society in general has some rights in the management. 44 Harvard Law Rev. 1049; 45 Harvard Law Rev. 1145, 1365. But so far as public utilities are concerned, their property is only strictly private in a qualified sense.

It would seem that if the plan adopted is a fair one which promotes economic security for the employee and 22 P.U.R.(N.S.)

thereby increases his mental and moral efficiency as a worker, such payments made for his benefit should be considered as compensation just the same as his weekly or monthly salary. For this reason, the ruling of the Commission should be reversed, and the Commission is ordered to make an allowance for the sums actually expended by the company in assisting its employees to purchase stock.

[9] A return of $6\frac{1}{2}$ per cent on the valuation was allowed by the Commission, which is similar to that allowed in other cases before this court for approximately the same period. A rate of return may vary as to times depending on business conditions, but it must be one that shall be reasonably sufficient to assure confidence in the financial soundness of the utility. Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission, 262 U. S. 679, 692, 67 L. ed. 1176, P.U.R.1923D, 11, 43 S. Ct. 675.

The company claimed that it was entitled to a return of $7\frac{1}{2}$ per cent to 8 per cent while the city, following the dissent of Commissioner Schaber, felt a rate of 6 per cent was adequate.

The testimony of the company was predicated upon a supposition that the cost to the company of the preferred stock should be 7.04 per cent annually and of the common stock 8.89 per cent annually. While this court cannot take judicial notice of facts not in the record, it can take notice of the fact that there was a severe depression during the years 1931, 1932, and 1933 which affected the earnings and yield of all companies.

The tables and evidence introduced show that a rate of return of $6\frac{1}{2}$ per cent during the early years of the or-

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dinance would be high, but that during the latter years was fair and reasonable. It is not a rate that could be said to be confiscatory.

On the other hand, in reviewing rates allowed to wasting asset corporations during normal times, many are in excess of the one found by the Commission. Considered from that standpoint, the city's contention that the rate was excessive must be rejected in view of the fact that similar rates for similar periods have been approved by the courts. *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 290, 78 L. ed. 1267, 3 P.U.R.(N.S.) 279, 54 S. Ct. 647; *Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 398, 78 L. ed. 1327, 4 P.U.R.(N.S.) 152, 54 S. Ct. 763, 91 A.L.R. 1403.

We have reviewed herein some of the assignments of errors claimed by the city of Akron, but there are, however, several important items yet to be considered. While the court has disposed of the claim that the cost of labor found for the laying of the distribution and service line equipment was high, it is contended that the formula employed for the ascertainment of the depreciation of field and transmission lines was improper. (Accounts 213, 214, and 226.)

The company suggested that tests should be made in an 18-inch section of the ten deepest pits to determine the depreciation of the pipe. The city suggested taking the deepest pit in an 18-inch section of exposed pipe or the probable deepest pit in a 20-foot joint of pipe. It was contended that a full joint of pipe rather than an 18-inch section should be used as a test since

it was necessary to discover where the pipe was the weakest or thinnest.

The Commission, following past practices, adopted the formula presented by the company. According to the great weight of the evidence, the tests used by the Commission disclosed an average condition of the pipe, and accordingly this court finds the test used was a fair one.

One of the principal objections made by the city is to the allowance for replenishing wasting assets. The Commission made a finding that "the amount of \$304,000 annually for the purpose of 'expenditures necessarily incurred in developing operated leaseholds' is proper and reasonable and is accordingly allowed which, after allocation to Akron, amounts to an average of \$26,590 for each of the years 1932, 1933, and 1934 on a gas sales basis." (17 P.U.R. (N.S.) at p. 445.)

The Commission, in making this finding, stated that the method used was "a departure from what has been done before by this Commission," but that it was reasonable and based on the facts in the record. To this ruling, Commissioner Schaber filed the following dissent (17 P.U.R.(N.S.) at p. 453):

"The majority Commissioners have included in the expenses of the company an allowance for so-called expenditures incurred in developing leaseholds. This they designate 'cost incurred in past' and fix the amount at \$304,000 per annum, allocating this additional expense to Akron for the year 1932—\$28,090; for 1933—\$25,992, and for 1934—\$25,688. This item is based on the amount of delay rentals paid in the past on unoperated acres and on investments in unoperat-

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ed acres canceled, and is clearly an allowance for payments for delay rentals upon leases in reserve (leases not presently used or useful) many of which have been canceled, under a new name. These allowances include not only the cost of carrying presently unoperated acreage, but the cost of acquiring and carrying unoperated acres not even now owned by the company—they include costs for acreage which will never be used and useful in the service of gas consumers. It is nothing more than 'old man delay rentals' on unoperated leases disguised in a new fantastic garb. Items of this character have been repeatedly rejected by this Commission in the past and such disallowances approved by the supreme court of this state as well as by the Supreme Court of the United States. *Logan Gas Co. v. Public Utilities Commission* (1929) 121 Ohio St. 507, P.U.R.1930B, 246, 169 N. E. 575; *Columbus Gas & Fuel Co. v. Pub. Utilities Commission*, 127 Ohio St. 109, P.U.R.1933D, 238, 187 N. E. 7; *Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 398, 78 L. ed. 1327, 4 P.U.R.(N.S.) 152, 54 S. Ct. 763, 91 A.L.R. 1403. Such was also our holding in the Cleveland Rate Case decided in July, 1934 (4 P.U.R.(N.S.) 433).

"It should be noted that this expense item is in addition to the allowance, out of current earnings, for depletion of the wasting assets of the company such as operated leaseholds, gas well construction, and gas well equipment, providing for a fund whereby new leases can be acquired. Applying the method used in the Cleveland Rate Case in finding the adjusted book cost or value of operated

leaseholds and natural gas rights, which costs are to be returned to the company by annual allowances as part of operating expenses, the adjusted book cost of such leases and rights at December 31, 1932, should be \$2,734,541; the depreciated value thereof as of that date should be \$2,077,547. These sums allocated to Akron should be \$252,672 and \$191,965 respectively.

"The action of the majority Commissioners in allowing such an item of expense is a marked departure from what was done by the Commission in the Cleveland Rate Case as well as placing an additional cost upon the ratepayer not heretofore sanctioned by Commission or court. Instead of having consistency in utility regulation it tends to uncertainty as well as to discrimination between the company's own customers.

"What is said here will apply equally to a like allowance in the case of the Hope Natural Gas Company."

[10] It is well settled that delay rentals paid by a producing gas company to keep alive leases of gas land in reserve should not be charged to operating expenses when an annual amortization allowance makes provision whereby new leases can be acquired and paid for out of current earnings. *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission*, *supra*. The sole question is whether sufficient depreciation allowance was made for replacement of operated wells when exhausted. *Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission*, *supra*.

It is conceded that, in addition to this allowance designated as "expenditure necessarily incurred in develop-

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ing operating leaseholds," other allowances were made for the depletion of wells on operated leases, for the book cost of operated leaseholds, and for drilling dry holes. These allowances would restore the nominal book cost by the time the gas was exhausted.

It is said, however, that such allowances do not restore any part of the sums spent in other activities for carrying, canceling and shifting leases to find gas-bearing acres now used in service.

These allowances, together with one arising under the formula adopted by Commissioner Schaber, would provide funds for the depletion of wells. To make an allowance for such activities as an operating expense would be to base a rate on property which was not used and useful in serving the public. Despite the fact that by the method used by the Commission only part of the amounts formerly considered delay rentals by courts were allowed, even such an allowance cannot be sanctioned.

Operating expenses are to be based upon the management of property which is used and useful. When the nonproductive acreage is used for purposes of production, the costs incurred in carrying it during its nonproductive period may then be capitalized. It is improper to consider such expenditures, which later are to be considered capital expenditures, as current operating expenses at this time.

The Commission, therefore, should have allowed only \$15,068 in 1932, \$14,013 in 1933, and \$15,945 in 1934 for the depletion of wasting assets instead of the average sum of \$42,093 for these years.

[11] About half of the gas used

in the city of Akron was purchased by the East Ohio Gas Company from its affiliate, the Hope Natural Gas Company, at a contract price of 38½ cents per M.c.f. at the river. The Commission found that this rate was fully sustained by the evidence.

It is claimed that in a recent Cleveland rate case, the Commission found that a fair price for gas purchased by the East Ohio Gas Company from the Hope Company should not exceed 37.1 cents per M.c.f. during a period from June 1, 1931, to June 1, 1936.

It is argued that the contract price should not be any higher in this case. This court cannot take judicial notice of the holding of the Commission in another controversy. Likewise, there is just as much ground to suppose that the Commission erred against the company in the Cleveland Case as there is to suppose it erred against the city of Akron in this case. For these two reasons, consideration of the Cleveland Case cannot be any authority in this appeal, but the court must be guided solely by the evidence now before it.

It is true that evidence of the rate in the Cleveland Case was introduced, and while it should be considered in the determination of the rate in this case, it might be pointed out that the rate period in the Cleveland Case was for different years than in the case now before the court. If the rate fixed by the Commission in the Cleveland Case had been 45 cents per M.c.f. at the river, the city of Akron would not be prevented from asserting such a finding was not fair and reasonable. Under such circumstances, certainly no one would contend that the river rate in the Cleveland Case should be

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conclusive any more than that the river rate established by other gas companies furnishing gas to other municipalities would be so considered. It, therefore, is a single item of evidence which should be considered together with other relevant items submitted by the parties.

The city of Akron was not bound by the price for which the East Ohio Gas Company purchased a supply from the Hope Natural Gas Company, an affiliated gas producing company, but had the right to inquire into the reasonableness of the contract price. *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission, supra.*

The test to be applied is whether the price was higher than that which would fairly be paid by a buyer unrelated to the seller and dealing at arm's length. *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission, supra*; *Western Distributing Co. v. Kansas Pub. Service Commission*, 285 U. S. 119, 76 L. ed. 655, P.U.R.1932B, 236, 52 S. Ct. 283.

The record in this case discloses that the Hope Natural Gas Company of West Virginia in 1933 produced 4,875,364 M.c.f. and sold 37,080,135 M.c.f. In 1934 it produced 5,953,904 M.c.f. and sold 43,534,630 M.c.f. It held approximately 325,000 acres which were operated fields and over half a million acres of unoperated ones.

From this we can deduce that much of the acreage owned by the Hope Company was held in reserve. In fact, it only produced about 12 per cent of the gas which it sold while the remainder was purchased from independent producers for approximately 20 cents per M.c.f. at the well mouth.

It is contended that the company

should in some way be penalized for this method of operation. If the fields were operated to capacity every day, the length of the life of the company as a producer might be shortened, the fields depleted and exhausted, and the consumers might have to look to new sources for a supply of gas. For that reason, this court cannot condemn such a policy at this time unless it would result in an exorbitant charge being made for gas.

In determining whether the contract price of 38.50 cents per M.c.f., existing between the Hope Natural Gas Company and the East Ohio Gas Company, was fair and reasonable, the Commission did not take all the facts into consideration. It valued the property of the Hope Natural Gas Company and determined its revenues and expenses the same as it did the property of the East Ohio Gas Company, and apparently made its findings upon an assumption that the Hope Company produced all of the gas sold to the East Ohio Gas Company. To test the contract price by such a method was to substitute a fiction for realities.

Inquiry, of course, may and ought to be made of the valuation, revenue, and expenses of an affiliated seller. *Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 398, 400, 414, 78 L. ed. 1327, 4 P.U.R.(N.S.) 152, 54 S. Ct. 763, 765, 91 A.L.R. 1403; *Western Distributing Co. v. Kansas Pub. Service Commission, supra*; *Id.* (1931) 58 F. (2d) 239, 241; *Smith v. Illinois Bell Teleph. Co.* (1930) 282 U. S. 133, 152, 75 L. ed. 255, P.U.R.1931A, 1, 51 S. Ct. 65; *United Fuel Gas Co. v. Kentucky R. Commission*, 278 U. S. 300, 73 L. ed. 390, P.U.R.1929A, 433,

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49 S. Ct. 150. But that is not the only method of determining whether the price paid by one producing gas company to an affiliate is a fair one.

Some years ago this court held that under the provisions of § 614-23, General Code, affiliated buyers must be served at reasonable rates, and that principle was approved by the Supreme Court of the United States. *Ohio Mining Co. v. Public Utilities Commission* (1922) 106 Ohio St. 138, 142, P.U.R.1923E, 180, 140 N. E. 143; *Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission*, *supra*.

When the Commission attempted to determine a fair cost of the gas at the Ohio river solely by the reproduction method, it ascertained it would be 42.82 cents per M.c.f. Furthermore, the Commission found that inasmuch as the contract price was only 38.50 cents per M.c.f., that was fair even though when a computation was made the evidence showed that the Hope Company would only receive a 3.72 per cent return at that price.

It should be obvious that the Hope Company would not agree to such a low return and the Commission should have been able to determine from such a test that the method employed was not a fair one upon which to base its findings. *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 290, 311, 78 L. ed. 1267, 3 P.U.R.(N.S.) 279, 54 S. Ct. 647. Whether this computation was erroneous because delay rentals were improperly considered or because the fields were held in reserve, we cannot say from the record.

A true method of testing the fair price of gas would be to determine what the average price of the 12 per

cent of gas produced by the Hope Company cost, and what the average price of the 88 per cent of the gas purchased from independent producers cost. To those costs should be added the fair and reasonable amounts necessary to transport the gas, either produced or purchased, to the river. After that determination, by considering the proportionate quantities sold, a fair price at the Ohio river would thereby be obtained.

It was conceded that the Hope Company paid on an average approximately 20 cents per M.c.f. at the well mouth to independent producers. At the suggestion of the representatives of the city of Akron, the Commission tested the rate by substituting that figure for the one based on the cost of production of the gas produced by the Hope Company. When that substitution was made, it was found that the price at the river would be 38.11 cents.

This substitute method was upon the assumption that all the gas was purchased and none produced by the Hope Company. However, inasmuch as it was conceded that the price for gas at the well mouth was 20 cents per M.c.f. and all other figures used were based on the evidence, our examination shows that 38.11 cents per M.c.f. would be a fair price for the 88 per cent of the gas purchased by the East Ohio Gas Company from the Hope Company.

In reference to the other 12 per cent, the Commission should recompute the cost of the price of the gas produced by the Hope Company by eliminating delay rentals, but following the rules in regard to taxes and stock plan deposits set forth herein. In this recomputation, however, if the cost is ex-

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cessive, it cannot be allowed. To find otherwise, the Commission would be sanctioning a price which would be more than fair and reasonable, and one which would not be comparable to that which an unrelated buyer would pay to an unrelated seller dealing at arm's length.

That portion of the order dealing with the price of gas to be paid to the Hope Company at the Ohio river is reversed and remanded with instructions to recompute a fair cost of the gas produced and sold by the Hope Company to the East Ohio Gas Company.

There is a claim made that, since the city of Akron is situated in the immediate vicinity of a large field, its geographical advantage should be reflected in the gas furnished to its inhabitants. This claim seems somewhat inconsistent with the admission that a large portion of the gas consumed comes from the West Virginia fields and is sold by the Hope Natural Gas Company. Consideration, of course, should be given, in determining the price, to the fact that it costs less to transport gas produced near Akron than it does to carry it from far distant fields. The evidence shows that the gas produced in the Akron district is piped into a system forming a unit which furnishes gas to many municipalities. The Akron consumer has no right to insist that he shall be supplied only with gas from Ohio fields. If Cleveland took the same position, the field might be exhausted, and only the smaller communities would pay the price of West Virginia gas. The city did not offer sufficient evidence to be given an allowance on the theory presented.

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[12] The Commission allowed the company to include its entire rate-case expense of \$119,344 as a proper deduction, amortized over a 4-year period. While the Commission found the ordinance rate was unreasonable, it is claimed, nevertheless, that the Commission found the company should reduce its rates and make certain refunds to consumers. For this reason, it is said that only a portion of the rate-case expense should be allowed.

It was necessary for the company to seek a review before the Commission unless it desired to abide by the ordinance rate which the Commission thereafter found was unlawful and unreasonable. To show that the rate was confiscatory, evidence of valuation and operating expense had to be presented. This was a single hearing, and such evidence was used also to determine the rate. It would be impossible to ascertain if there was any evidence which was exclusively relevant in the ordinance case that was not likewise relevant to a proper rate determination. The effect of the hearing and evidence was so broad that it was relevant to both issues. It would, therefore, be impossible to prorate such expense, and this court sees no reason for so doing. The entire rate-case expense was properly allowed. See *Monroe Gaslight & Fuel Co. v. Michigan Pub. Utilities Commission*, 11 F. (2d) 319, 325, P.U.R.1926D, 13; *Mobile Gas Co. v. Patterson* (1923) 293 Fed. 208, P.U.R.1924B, 644, modified on other grounds in 271 U. S. 131, 70 L. ed. 870, P.U.R.1926D, 183, 46 S. Ct. 445.

Other minor errors are alleged, but none of them would have any substantial bearing upon the reasonableness

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of the rates, and this court finds no other errors than those pointed out herein.

[13] Summarizing the conclusions reached, the court finds that the Public Utilities Commission committed error in its computation of the Federal income and state excise tax allowances, and in its failure to give any allowance for the company's payments on the plan whereby employees could purchase stock. The Commission likewise made an improper allowance for so-called expenditures incurred in developing operating leaseholds, and used an improper method in testing whether the contract price for sales of gas by the Hope Natural Gas Company to the East Ohio Gas Company was a fair one. Except in these respects, the court finds no error, and the separate findings, other than those mentioned, should be affirmed.

From the record presented, this court cannot in all instances make specific findings of fact to correct those improperly made by the Commission. That is the function of the Commission.

Because of the errors set forth, the order of the Commission was unreasonable and unlawful. The order is therefore reversed and remanded to the Public Utilities Commission with instructions to correct the improper findings in accordance with the ruling of the court.

Order reversed and remanded.

Weygandt, C.J., and Matthias, Day, and Zimmerman, and Williams, JJ., concur.

MYERS, J.: I concur in the judgment of reversal except as hereinafter stated. For the most part, I

agree with the majority opinion. As amended in 1935, § 544, General Code, reads as follows: "A final order made by the Commission shall be reversed, vacated, or modified by the supreme court on appeal, if upon consideration of the record such court is of the opinion that such order was unlawful or unreasonable." The present statute, therefore, requires examination of both law and fact as found in the record to determine whether the order is unreasonable or unlawful. I disagree with the majority opinion in the following respects, to wit, the so-called river rate, the rate of return, and stock-plan deposits.

In respect to the river rate, what better evidence could there be in the instant case than the price charged during practically the same period by the Hope Company to East Ohio for another northern Ohio city much larger than Akron? Gas sold by Hope to East Ohio is delivered at the Ohio river. As far as Hope is concerned, there is no material difference in the production or buying from independent producers. Since it appears from the record that gas was sold at the Ohio river by Hope to East Ohio for Cleveland for 37.1 cents per M.c.f., there is no valid reason for a different price to East Ohio for Akron when, in the opinion of the writer, the only difference is one of destination after sale and delivery at the river.

There is evidence to the effect that Hope sold gas during the ordinance period to independent companies in West Virginia at approximately 31½ cents and to domestic consumers for 34 cents or less, per M.c.f., delivered at the burner tips. While good business policy justified East Ohio in

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keeping in reserve adequate acreage for future needs, such as the Akron field, that company was not justified at the same time in paying at the Ohio river a much higher price than independent, smaller companies were paying Hope in West Virginia. This evidence of other sales by Hope is more indicative of a fair market price in the instant case than the method adopted in the majority opinion for the reason that such sales are the result of competition in the West Virginia field. The fact that Hope purchased gas for 20 cents per M.c.f. at the well mouth and sold to independent companies at a margin of 12 cents above cost and to domestic consumers at a margin of 14 cents above cost would seem to indicate that a margin of 17.1 cents above cost for transmission to East Ohio at the river is more than reasonable.

Hope is not a principal party in this litigation. As far as this proceeding is concerned, it is the marketing company to East Ohio. If it be shown that East Ohio is able to purchase gas for delivery at the river for 37.1 cents per M.c.f., which it is transmitting to Cleveland at a reasonable profit, then it should not be charged more by Hope for gas to be used in Akron. The Hope Company has nothing to do with transmission or distribution beyond the Ohio river. That is the affair of East Ohio. East Ohio, purchasing at the river for one customer in Ohio at 37.1 cents, should not be compelled to pay more for gas coming through the same lines for another customer. To pay more would be unreasonable. In my opinion 38.5 cents per M.c.f. in this proceeding is unreasonable. A reasonable and adequate rate to be

charged East Ohio by Hope for gas delivered at the Ohio river should be 37.1 cents per M.c.f. This would still be considerably higher than prices charged by Hope to unaffiliated independent companies.

In respect to the rate return, we find that East Ohio is in a sound financial position. Its property, its distribution system, its transmission lines, its financial condition, its reserves, all bear witness to the fact that its opportunity for serving municipalities in a large portion of Ohio is secure for years to come. Adequate allowances were made by the Commission to enable the company usefully and profitably to serve its customers. Under such conditions, the rate of 6½ per cent allowed by the Commission was unreasonable. The reserves of the company are adequate for any reasonable emergency. It has a reserve gas field near Akron that, together with gas from Hope, will protect and support its ordinary and peak-load requirements for a good many years to come. The witness, Tonkin, vice president of the company, testified as to the position of Hope in regard to peak-load requirements. He testified that the greater portion of the gas sold by Hope came from independent operators in order that its own maximum capacity might be held in reserve for peak-load contingencies. This policy insures to East Ohio at all times an adequate supply of gas, thereby taking the question of gas supply out of the field of conjecture into the realm of reality. This is sound business policy, but it is also an added reason why the company should not be allowed an excessive rate of return. Considering all the foregoing elements of security, a return of 6 per

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cent is not only adequate but reasonable in every respect.

While the amount expended by East Ohio toward the so-called stock deposit plan is not large, nevertheless it had no place in the rate-making structure. The purpose may be laudable in itself, but in the manner in which it is here exercised it is only one more difficulty thrown in the path of reasonable rate-making procedure. The amount expended by East Ohio for its employees under this plan was not for purchase of its own stock but stock in the "parent company," as paragraph 8 of the syllabus indicates.

Many of the difficulties in this rate proceeding have their origin in the fact that both Hope and East Ohio have a common parentage. The expenditure of money rightfully belonging to the consumers for the purchase

of stock in a parent company exercising dual control over both Hope and East Ohio, was not intended by the statute to be considered for rate-making purposes. Social security payments, referred to in the majority opinion, are imposed by law, and, therefore, a proper cost charge, but the statutes governing this proceeding do not authorize a voluntary contribution for purchasing stock as set forth in the record. While the amount expended in furtherance of this plan in the instant proceeding is not large, nevertheless the principle involved in using company funds for tying employees of operating utility companies into the financial meshes of a parent holding company should not be encouraged. In regard to this stock deposit plan, the order of the Commission was right.

OKLAHOMA SUPREME COURT

Community Natural Gas Company

v.

Corporation Commission of Oklahoma et al.

Lone Star Gas Company

v.

Corporation Commission of Oklahoma et al

[Nos. 27259, 27628.]

(— Okla. —, 76 P. (2d) 393.)

Rates, § 39 — Commission authority — Hearing and notice — Findings — Basis for order.

1. In order for the Corporation Commission of Oklahoma to have authority

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to make a valid permanent rate order for a public utility, the Commission must have made a complete investigation of the circumstances, and have accorded all parties an opportunity to be heard, and have made findings of fact and conclusions of law upon the evidence introduced, and have reached a final result that is fair and reasonable to the public and utility alike, p. 510.

Procedure, § 1 — Legislative or judicial.

2. Proceedings legislative in nature are not judicial proceedings in a court, no matter what the dominant character of the body in which such proceedings are had. The question depends not upon the character of the body, but upon the character of the proceedings, p. 513.

Rates, § 2 — Nature of rate making — Legislative proceeding.

3. Rate-making proceedings are legislative and, since the establishment of a rate is not a matter of exact science or capable of precise mathematical calculations, broad, general, equitable principles must govern in the establishment of a rate, p. 519.

Rates, § 640 — Duties of Commission — Prompt hearing.

4. In a case where a public utility has properly, sufficiently, justly, and lawfully applied to the Corporation Commission for an increase of its rates and charges, and alleges that its present rates are inadequate and deprive it of its property without due process of law, the Corporation Commission, upon assuming jurisdiction over the cause, is required by law to proceed with a hearing on said case, and to make a final determination of the issues, and in so doing it must not, without the consent or fault of the utility, permit unnecessary, unreasonable, unjust, or unjustifiable delay, p. 519.

Commissions, § 1 — Performance of governmental functions — Duty of state.

5. A state, having established by law an agency to perform a governmental function for it, is bound to see that those over whom such agency exercises control are not misled or prejudiced by its agents, and all of the actions of the state's agency must be characterized by resolute good faith, p. 523.

(RILEY and WELCH, JJ., dissent; OSBORN, C.J., dissents in part.)

[January 25, 1938. Rehearing denied February 21, 1938.]

Headnotes by the Court.

APPEALS from orders of Commissions in natural gas rate case; orders vacated and cause remanded. For Commission decisions see P.U.R.1933C, 1, 80.

APPEARANCES: Roy C. Coffee and Marshall Newcomb, both of Dallas, Tex.; C. C. Hatchett, of Durant, and Blakeney, Wallace, Brown & Blakeney, of Oklahoma City, for plaintiffs in error; J. B. A. Robertson and S. J. Gordon, both of Oklahoma City, for Corporation Commission; D. A. Stovall, of Hugo, for citizens of Hugo;

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S. D. Williams, of Wynne Wood, for citizens of Pauls Valley and Wynne Wood; Walter Hubbell, of Walters, for city of Walters.

BAYLESS, Vice Chief Justice: [1] Community Natural Gas Company, a corporation, and Lone Star Gas Company, a corporation, bring separate ap-

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peals to this court, under Nos. 27,259 and 27,628; the Corporation Commission of Oklahoma et al., being defendants in error in each case. The appeals are consolidated and involve complaints concerning the actions of the Commission in consolidated cause No. 10,777 before the Commission (P.U.R.1933C, 1, 80). The cause was instituted December 28, 1930, by citizens of the town of Walters, Okla., seeking to obtain a reduction in the burner-tip rates for natural gas. Citizens of other towns in southern Oklahoma joined with similar pleas until eventually the citizens of twenty-six towns were involved. Community Natural Gas Company, hereafter referred to as Community, serves the users of natural gas in these towns with burner-tip service. It purchases the natural gas in wholesale quantities at the city gates and distributes and sells it to users within the respective towns. Its business is wholly intrastate and is wholly subject to regulation as a public utility by the state of Oklahoma. Article 9, Constitution of Oklahoma, and Chap. 93, Sess. Laws 1913, as amended by Laws 1929, Chap. 353, § 1, 17 Okla. Stat. Anno. §§ 151-155. Community makes such purchases of natural gas from Lone Star Gas Company, hereafter referred to as Lone Star, which is a foreign corporation, admitted to do business in Oklahoma, and, in so far as we are shown, is engaged in intrastate and interstate business and probably is not subject to regulation by the state of Oklahoma. Virtually the entire capital stock of these corporations is owned by Lone Star Gas Corporation, a corporation, hereafter referred to as holding company, a foreign corporation, not admit-

ted to do business in Oklahoma, and, in so far as this case is concerned, not subject to regulation in Oklahoma.

The Commission conducted hearings and received much evidence. Because of this intercorporate affiliation, and certain contractual relations, the Commission desired evidence of the business practices among these corporations in order to determine the effect thereof upon the rate base of Community. Lone Star furnished evidence. Holding company refused on the theory that it was not in anywise subject to the jurisdiction of the state of Oklahoma. The Commission deemed itself unable to proceed to a final order fixing a permanent rate without the evidence it desired from holding company. After making detailed findings of fact as to the rate base of Lone Star, it announced that no findings could be made finally as to Community or Lone Star, nor a permanent rate ordered until the evidence it desired was furnished. An appeal was taken from the order of the Commission, No. 6201, embodying these issues and our opinion thereon is reported as Lone Star Gas Co. v. Corporation Commission (1934) 170 Okla. 292, 7 P.U.R.(N.S.) 490, 39 P. (2d) 547.

In that opinion we approved the formula adopted by the Commission upon which to arrive at the rate base of Community, which included evidence regarding the business of Lone Star and holding company. We upheld the right of the Commission to demand such evidence from them. We approved the establishment of a temporary reduction in burner-tip rates, as probably justified by the evidence introduced when further supported by

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the additional evidence sought, and as proper in a punitive nature to enforce the will of the Commission on the obstinate holding company, which alone would actually be affected by any confiscation arising from the temporary rate. We disapproved the effort of the Commission to regulate the price at which Lone Star could sell natural gas to Community, and we disapproved the use of distress labor prices in arriving at costs in the rate base of Lone Star. We remanded for further testimony and a final order and permanent rate. The appeal before us now concerns what was done in obedience to the remand.

By express language in Order No. 6201, the reduction in burner-tip rates was temporary, (1) because sufficient evidence was not available to justify a permanent rate under the formula adopted; and (2) it was said the additional evidence desired might justify a further reduction. In other words, additional evidence was necessary to permit the establishment of a permanent rate differing from the one in effect when the investigation began. It was possible that when all of the evidence was in no reduction would be legally permissible, or that an increase would be proper. Our remand affirmed the power to demand this evidence and directed the taking of it.

After the commencement of the investigation, Community petitioned for a raise in rates. Following the remand of the former appeal, Community again petitioned for an increase in rates. Therefore, in addition to the pleas for a reduction in rates, there were pleas for an increase in rates. The dissatisfaction of both utility and customers with existing rates is mani-

fest, and the Commission had a duty to perform.

After receiving our mandate and suspending further the temporary rates, the Commission conducted an investigation of the records of the holding company, and set the cause for hearing at different dates, but never thereafter held another hearing. On May 5, 1936, the application for an increase in rates filed July 19, 1935, the second one filed by Community, was ordered docketed under No. 16,956, as a separate proceeding. On June 5, 1936, a date duly set for hearing the cause, Community and Lone Star appeared ready for trial. The Commission refused to hear them, and entered a general order disposing of the entire matter. These appeals are from those orders.

By these orders, the following was provided: (1) The rate case against Community, that is the pleas to reduce rates, was dismissed without prejudice; (2) the case against holding company was dismissed, without prejudice; (3) Order No. 2591 suspending further the operation of the temporary rates was vacated and set aside; (4) Order No. 6201, the order involved in the former appeal, was adopted as the permanent rate for the burner-tip; (5) all of the findings of fact of Order No. 6201 are adopted as the findings of fact to support the permanent rate (although it is to be noticed that such findings relate to the rate base of Lone Star and not Community); (6) required Lone Star to reduce its gate rate to Community 10 cents per m. c. f. when we had expressly condemned such an order in our former opinion; (7) required Community to reduce its burner-tip

rate 10 cents per m. c. f. as a resulting savings, without basing the same on evidence; and (8) rendered judgment against Community for \$168,-901.14, for over collections—that is, the difference between the old rate and the temporary rate now made final.

[2] Among the contentions presented in the former appeal was the one that in acting thereon this court was performing a judicial function and not a legislative function. In *Pioneer Teleph. & Teleg. Co. v. State* (1914) 40 Okla. 417, 138 Pac. 1033, 1036, following *Prentis v. Atlantic Coast Line Co.* (1908) 211 U. S. 210, 53 L. ed. 150, 29 S. Ct. 67, we held that in considering appeals from rate orders affecting transportation and transmission companies, we were acting legislatively and not judicially. Original jurisdiction of the Commission, and appellate jurisdiction of this court, over gas companies was not established until 1913. Chapter 93, Sess. Laws 1913, 17 Okla. Stats. Anno. §§ 152–155, and § 151 note. In many cases we had said that our function in those appeals was likewise legislative. We did not answer the contention made in the former appeal for several reasons, the primary one being that the order under consideration was temporary only. The temporary order and appeal were an interlude in the cause. What we did in our earlier opinion was to announce rules of law relating to the powers of the Commission and the manner in which they might be enforced, and to make a temporary rate order of our own. Nevertheless, this did not make our action judicial, although the rules of law announced undoubtedly will be adopted in strictly judicial proceedings. This

is pointed out in *Prentis v. Atlantic Coast Line Co. supra*, at p. 226 of 211 U. S.:

“But we think it equally plain that the proceedings drawn in question here are legislative in their nature, and none the less so that they have taken place with a body which, at another moment, or in its principal or dominant aspect, is a court such as is meant by § 720 [28 USCA § 379]. A judicial inquiry investigates, declares, and enforces liabilities as they stand on present or past facts and under laws supposed already to exist. That is its purpose and end. Legislation, on the other hand, looks to the future and changes existing conditions by making a new rule, to be applied thereafter to all or some part of those subject to its power. The establishment of a rate is the making of a rule for the future, and therefore is an act legislative, not judicial, in kind, as seems to be fully recognized by the supreme court of appeals (*Commonwealth v. Atlantic Coast Line R. Co.* [1906] 106 Va. 61, 64, 55 S. E. 572, 7 L.R.A. (N.S.) 1086, 117 Am. St. Rep. 983, 9 Ann. Cas. 1124), and especially by its learned president in his pointed remarks in *Winchester & S. R. Co. v. Commonwealth* (1906) 106 Va. 264, 281, 55 S. E. 692. See, further [citing cases].

“Proceedings legislative in nature are not proceedings in a court, within the meaning of Rev. Stat. § 720, no matter what may be the general or dominant character of the body in which they may take place [citing case]. That question depends not upon the character of the body, but upon the character of the proceedings [citing case]. . . . The decision upon

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them cannot be *res judicata* when a suit is brought [citing case]. And it does not matter what inquiries may have been made as a preliminary to the legislative act. Most legislation is preceded by hearings and investigations. But the effect of the inquiry, and of the decision upon it, is determined by the nature of the act to which the inquiry and decision lead up. A judge sitting with a jury is not competent to decide issues of fact; but matters of fact that are merely premises to a rule of law he may decide. He may find out for himself, in whatever way seems best, whether a supposed statute ever really was passed. In *Pickering v. Barkley*, Style, 132, merchants were asked by the court to state their understanding as an aid to the decision of a demurrer. The nature of the final act determines the nature of the previous inquiry. As the judge is bound to declare the law, he must know or discover the facts that establish the law. So, when the final act is legislative, the decision which induces it cannot be judicial in the practical sense, although the questions considered might be the same that would arise in the trial of a case. If a state Constitution should provide for a hearing before any law should be passed, and should declare that it should be a judicial proceeding in rem and the decision binding upon all the world, it hardly is to be supposed that the simple device could make the constitutionality of the law *res judicata*, if it subsequently should be drawn in question before a court of the United States. And all that we have said would be equally true if an appeal had been taken to the supreme court of appeals and it had confirmed

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the rate. Its action in doing so would not have been judicial, although the questions debated by it might have been the same that might come before it as a court, and would have been discussed and passed upon by it in the same way that it would deal with them if they arose afterwards in a case properly so called."

So, although we announced rules of law and procedure for the guidance of the Commission, the nature or character of the Commission's action and our action thereon should determine whether we acted legislatively or judicially. It is beyond dispute that the Commission was acting legislatively. It had not completed its work, as was recognized by every one having any connection with the matter, and the Commission intended to proceed further in the matter. The action which we took was legislative in character, for we not only examined the record, but we corrected what the Commission had done and substituted our own order therefor. We not only debated the correctness of its action, but when we found any error we did not content ourselves by pointing it out but made the proper order. Our order of remand directed further proceedings and looked ultimately to the final order or permanent rate. Thereafter, this court in the case of *Oklahoma Cotton Ginners' Asso. v. State* (1935) 174 Okla. 243, 51 P. (2d) 327, overruled our earlier opinions saying that appeals from rate orders affecting utilities other than transportation and transmission companies were legislative, and held that such appeals were judicial. The writer of this opinion dissented to that view, and held to the view he had in writing

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the opinion in the former appeal; although he now recognizes the rule announced in the Ginners' Case as the law applicable.

The writer of this opinion was the author of the opinion in the former appeal and at that time entertained no doubt that this court was acting legislatively in reviewing the order of the Commission. In fact, the last pronouncement of this court on the matter was contained in *Poteau v. American Indian Oil & Gas Co.* (1932) 159 Okla. 240, P.U.R.1933C, 318, 322, 18 P. (2d) 523, 526, written in June, 1932, and in order that there may be no ground for supposing that the language of the opinion in that case was misconstrued, the following is quoted therefrom:

"It was held in *Atchison, T. & S. F. R. Co. v. State* (1909) 23 Okla. 510, 101 Pac. 262, that in establishing a rate that the Corporation Commission acts in a legislative capacity and the supreme court of the state of Oklahoma in reviewing an order of the Commission establishing a rate in which an appeal has been taken acts in a legislative capacity. This seems to be the well-established rule in this court as well as in the United States court. *Chicago, R. I. & P. R. Co. v. State* (1909) 24 Okla. 370, 103 Pac. 617, 24 L.R.A. (N.S.) 393; *Atchison, T. & S. F. R. Co. v. Miller* (1911) 28 Okla. 109, 114 Pac. 1104; *Pioneer Teleph. & Teleg. Co. v. Bartlesville* (1913) 40 Okla. 583, 139 Pac. 694. In *Prentis v. Atlantic Coast Line Co.* *supra*, the court holds that the establishment of railway passenger rates by the Virginia State Corporation Commission is not *res adjudicata* in a suit which seeks injunctive relief on the

grounds that the rates are confiscatory, although such Commission for some purposes is a court and acted only after hearing and investigation, since proceedings to establish rates are legislative and not judicial in their nature. . . . Owing to the fact that the Corporation Commission, in prescribing rates and regulations for public utilities, acts only within the powers delegated by the state Constitution, which are legislative and not judicial, and on appeal from the Corporation Commission the Supreme Court may review an order of the Commission prescribing a schedule of rates or charges to ascertain the reasonableness or justness thereof, and, if found to be unreasonable and unjust, may prescribe a schedule of rates to be enforced in lieu of the rates prescribed by the Commission, we are of the opinion and hold that the rate, as fixed by the Corporation Commission on March 13, 1928, according to the facts at time of the inquiry, should be for the first 50,000 cubic feet 38 cents per thousand cubic feet, for the next 150,000 cubic feet 25 cents per thousand cubic feet, for the next 300,000 cubic feet 18 cents per thousand cubic feet, and for all over 500,000 cubic feet 10 cents per thousand cubic feet, until changed by the Commission, based upon a fair, just, and reasonable rate at time of inquiry."

In the opinion in the Ginners' Case, *supra*, is a review of some of the former opinions of this court holding to the same effect. In addition to these, there are many more: *Oklahoma Nat. Gas Co. v. State*, 78 Okla. 5, P.U.R.1920D, 282, 188 Pac. 338; *Oklahoma Nat. Gas Co. v. Corporation Commission* (1923) 90 Okla. 84,

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P.U.R.1924A, 132, 216 Pac. 917; Okmulgee Gas Co. v. Corporation Commission (1923) 95 Okla. 213, P.U.R.1924B, 249, 220 Pac. 28; Consumers' Gas Co. v. Corporation Commission (1923) 95 Okla. 57, P.U.R. 1924A, 743, 219 Pac. 126; McAlester Gas & Coke Co. v. Corporation Commission, 101 Okla. 268, 270, P.U.R.1924E, 3, 224 Pac. 698; McAlester Gas & Coke Co. v. Corporation Commission (1924) 102 Okla. 118, 227 Pac. 83; Southwestern Nat. Gas Co. v. Cherokee Pub. Service Co. (1935) 172 Okla. 325, 10 P.U.R. (N.S.) 75, 44 P. (2d) 945. In addition to this, the various Federal courts in many cases understood that this court had so announced the law, and accepted our statement of the law as binding upon them in their consideration of the Federal questions involved. A list of these cases will be found in the headnote to the opinion of the Supreme Court of the United States in Oklahoma Corp. Commission v. Cary (1935) 296 U. S. 452, 80 L. ed. 324, 326, 12 P.U.R.(N.S.) 161, 56 S. Ct. 300.

It is clear that the action which we took was legislative in character and not judicial. As stated above, it was beyond dispute that the Commission was acting in a legislative proceedings and in reviewing and correcting what it had said and done we did not stop with pointing out the errors committed, but we proceeded to substitute for its order the order which we felt should have been made by the Commission. If we had been acting in a judicial capacity, we would not have been called upon to do this, and our actions were and are inconsistent with a judicial review. As is stated in the 22 P.U.R.(N.S.)

Prentis Case, *supra*, it is the nature of the action which is taken that determines this question. Therefore, any later announcements of law upon the same, or other cases, do not suffice to change the essential nature of our previous action in relation to the order considered on the former appeal.

The primary question of law before us is whether in the light of the opinion in the Ginners' Case, *supra*, we are to adhere strictly to our former opinion, and treat all matters touched upon therein as *res judicata*, or whether acting in a judicial capacity we are to refuse approval to the latest orders of the Commission under the circumstances of the case as they now exist. To adopt the first alternative would be manifestly inequitable. We failed to speak definitely upon the issue in our former opinion, and took steps which were legislative in nature. If we had spoken definitely, and had said we were acting legislatively, the rule announced in Pioneer Teleph. & Teleg. Co. v. State, *supra*, at p. 425 of 40 Okla. would have applied: "Three remedies were available to the appellant by which the validity of said order might be challenged: (1) By appeal; . . . (2) by application made directly to the Commission to set aside order; . . . and (3) by an action in equity to restrain its enforcement."

If we had said we were acting judicially, then Community would have had an opportunity to seek a review by the Supreme Court of the United States of our application of the law relative to the Federal questions. Our silence undoubtedly left some feeling of uncertainty in the matter.

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It is to be considered, also, that at that time Community had its choice of forums—either Federal or state. The uncertainty existing in our opinions at that time led the Federal courts to assume jurisdiction of an action in equity to review a supposed legislative order. *Oklahoma Corp. Commission v. Cary, supra*. We felt no doubt existed on the matter at the time of our former opinion, and since the matter we were called upon to review was a temporary order, something in the nature of an interlocutory step, and since we felt that the investigation would be pursued to its logical and legal end in conformity with the rules announced therein, we did not deem it necessary to pass upon the issue.

Ordinarily, the rule of *res judicata* applies only to judicial proceedings. As was pointed out in the *Prentis Case, supra*, the findings of fact and rules of law announced in a legislative proceeding cannot be *res judicata* upon the issues subject to the scrutiny of a court in a judicial review.

However, if it should happen that such rule was applicable to a situation such as this, we would be forced to apply to it the rule we applied in the case of *Carter Oil Co. v. Eli* (1932) 164 Okla. 273, 281, 23 P. (2d) 985, 992, which is stated as follows: "Where the judgment of a lower court has been reversed by this court upon an appeal by proceedings in error and the case remanded to the lower court for a new trial, the lower court, upon the second trial, is required to follow, as the law of the case, the judgment of this court therein rendered. On a second appeal in said case to this court,

the decision of this court and rules of law by it announced in its opinion on the first appeal constitute the law of the case as to all points decided in the first opinion, but this is not a cast-iron rule incapable of relaxation in any event. On a second appeal to this court, it may review and reverse its former decision in the same case, where it is satisfied that gross or manifest injustice has been done by its former decision and will do so where the mischief to be cured far outweighs any injury that may be done in the particular case by overruling a prior decision, and especially where the party benefiting from the erroneous judgment, and in full reliance thereon, has not surrendered substantial and valuable rights which cannot be restored by the court."

In view of what we have pointed out concerning the former order of the Commission, and our opinion thereon, we think it would be manifest injustice to now hold that later views of law impel an adherence to the strict letter of that opinion as approving in a judicial review the legislative action therein considered.

Community should not be charged with the waiver of any of its rights for its failure to pursue one of the remedies, when we did not then think it could do so because the legislative order was not yet final. Nor do we think that we should now hold that the rule of *res judicata* applies and forbids a judicial review thereof now.

Since the protection of the constitutional guaranties can be had by resort to equity, it necessarily follows that such relief cannot be had until an equitable showing is made. The general rule is stated in 51 C.J. 85, § 152:

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"The courts have no general supervisory power over Public Utility Commissions, and, except as wider authority may be expressly delegated by statute, judicial interference with their orders by way of injunction must be grounded upon some illegal encroachment upon property rights. Thus, in accordance with the rule applicable to injunctions generally, a suit for an injunction to restrain the enforcement of an order of the Commission will not lie in the absence of some ground for equitable relief."

A discussion of the general rule that while a case is pending and undetermined before a Commission a utility does not have recourse to courts of equity for relief will be found in P.U.R.1924E, at p. 6. The Supreme Court of the United States said in *Gilchrist v. Interborough Rapid Transit Co.* 279 U. S. 159, 73 L. ed. 652, P.U.R.1929B, 434, 49 S. Ct. 282, that it is necessary to show that a Public Utility Commission has taken or is about to take some improper action and that such action will result in the enforcement of orders resulting in confiscation before the Federal courts will be justified equitable relief. Other cases in which discussions of conditions precedent to the granting of equitable relief are: *Prendergast v. New York Teleph. Co.* 262 U. S. 43, 67 L. ed. 853, P.U.R.1923C, 719, 43 S. Ct. 466; *Louisville & N. R. Co. v. Railroad Commission* (1912) 63 Fla. 491, 58 So. 543, 44 L.R.A. (N.S.) 189, and *Illinois Bell Teleph. Co. v. Commerce Commission* (1922) 306 Ill. 109, 137 N. E. 449, affirming (1922) 227 Ill. App. 23. Many other cases will be found cited in P.U.R. 22 P.U.R.(N.S.)

Digest, Vol. 2, Injunctions, §§ 2, 4, and 11-16.

At the time of the former appeal the Commission had suspended the operation of the temporary rates and had permitted Community to give a bond for this purpose. We directed in our mandate that no further suspension be permitted unless the appealing parties showed good faith. When our mandate had been received by the Commission, the companies appeared and fully satisfied the Commission that they would furnish all of the evidence desired from them; and, thereupon the Commission permitted the further suspension of the operation of the temporary rate. When the Commission had entered the orders from which the present appeals are taken, it refused to permit Community to suspend the operation of the permanent rate ordered. Thereupon, Community applied to this court for permission to supersede said orders, and this court granted the application. Therefore, allowing for this short period of time, there has never been a time when Community was threatened with the immediate execution of the orders of the Commission, and it is doubtful whether it could have made a showing in equity under the rules above stated. It is reasonably certain that if we now approve the orders of the Commission now under consideration, we will be reversing the processes. We will be saying now that we acted judicially earlier, and that Community is to be penalized for its lack of ability to anticipate changes in the views of this court on the law.

Such a situation would undoubtedly appeal to a court of equity. The

uncertainty existing in our opinions afforded reason why the Federal courts undertook to afford equitable relief from the asserted confiscation arising from a final legislative act contained in Oklahoma Corp. Commission v. Cary, *supra*.

[3] A rate proceeding is legislative in character, but it is conducted along and governed by equitable principles. The object of such a proceeding is to arrive at what is fair and reasonable. The terms "fair," "reasonable," "fair and reasonable," "just, reasonable, and adequate" appear with such frequency in the cases as to preclude citation. P.U.R. Digest, Vol. 4, Rates, § 120. The reasonableness of a rate is a question of fact. Illinois C. R. Co. v. Interstate Commerce Commission (1907) 206 U. S. 441, 51 L. ed. 1128, 27 S. Ct. 700. The reasonableness of a rate cannot be exactly determined by any rule or rules or computed by any mathematical calculation. Re Alabama Power Co. (Ala.) P.U.R.1925C, 840. "The determination of the rates to be charged involves the question of dividing the burden between the various classes and groups. . . . It appears to be not an exact science, but must be based on a broad consideration of all factors involved." Re Pacific Teleph. & Teleg. Co. (Cal. 1929) P.U.R.1930C, 481, 515. The interests of the public as well as the owner of the property must be considered. Covington & L. Turnpike Road Co. v. Sandford (1896) 164 U. S. 578, 41 L. ed. 560, 17 S. Ct. 198. It is not optional as to what rates shall be, but it is the duty to satisfy the demands of law and equity. Re Mountain States Teleph. & Teleg. Co. (Utah) P.U.R.1922E,

293. One of the customary remedies for relief from unfair or unreasonable rates is the equitable remedy of injunction. Generally, the basis for relief sounds in constitutional guaranties, but courts of equity furnish direct relief. Pioneer Teleph. & Teleg. Co. v. State, *supra*; 51 C. J. 84, § 151 et seq. The cases involving judicial reviews in these matters do not say that the judicial review is equitable in that they constitute a branch of the law of equity, but sight is never lost of what is the fair, or reasonable, or just—or in the final analysis, equitable thing to do.

[4] The Commission has the duty to act when applications are addressed to it seeking a change in rates. The first application was filed in this matter in December, 1930. Hearings were held and Order No. 6201, the temporary order spoken of herein, was made March 9, 1933 (P.U.R. 1933C, 1) and the appeal therefrom was disposed of and the mandate returning the matter to the Commission from this court was issued January 15, 1935. About eighteen months later the order from which the present appeal is taken was entered. Twice during that 6-year period Community applied to the Commission for relief in the form of an increase in rates. Deducting the period of time during which the obstinacy of holding company prevented the Commission from acting, there yet remains a period of upwards of three years for the Commission to act upon these applications. The first application which was on file before the former appeal the Commission seems to have ignored altogether, unless it can be said that making the temporary rate

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the permanent rate was incidentally a denial of this application. The Commission did not say so, and since it made no findings of fact as to Community's rate base, we have nothing before us from which we can infer as much. The second application was stricken from this proceeding, and was docketed as a separate cause to be heard in the future. Thus the Commission has failed to give attention to Community's applications for an increase in rates. In *McAlester Gas & Coke Co. v. Corporation Commission*, 101 Okla. 268, P.U.R.1924E, 3, 224 Pac. 698, we said: "In a case where a public utility has properly, sufficiently, justly, and lawfully instituted proceedings before the Corporation Commission for an increase of its rates and charges, and alleges that its present rates are confiscatory and deprive it of due process of law, the Corporation Commission, upon assuming jurisdiction over the cause, is required by law to proceed with a hearing on said case, and to make a final determination of the issues, and in so doing it must not, without the consent or fault of the utility, permit unnecessary, unreasonable, unjust, or unjustifiable delay."

In that case the application was filed October 4, 1921, a hearing was held and final submission of the case to the Commission occurred February 2, 1922. January 18, 1924, the Commission denied the application, and the company appealed. It applied for immediate relief in the nature of a temporary increase in rates, to be guaranteed by a bond for repayment if improvidently granted, and this court granted such relief. It did so out of consideration of the unreasonable

and unjustifiable delay in passing upon the application. In that opinion we pointed out the safeguards which surround a utility whose property is devoted to public use and whose rates are subject to state regulation. In view of what was said in that case, we must hold as a matter of law that the Commission had the duty to pass upon both applications, which were timely filed, and it committed error in apparently ignoring one and continuing another. In *Rockland Light & P. Co. v. Maltbie* (1934) 241 App. Div. 122, 4 P.U.R.(N.S.) 113, 271 N. Y. Supp. 858, temporary rates were established pending further hearing, but they were enjoined where it was shown that as much as a year had elapsed and no date was set for further hearings. In *Prendergast v. New York Teleph. Co.* 262 U. S. 43, 67 L. ed. 853, P.U.R.1923C, 719, 43 S. Ct. 466, it was said that temporary rates would not be enjoined unless it appeared that some rule of equity was violated, but even under such circumstances consideration would be given to the fact that further hearing was set for an early date. It is true, as stated in the Commission's last order, that much time has elapsed and many changes in conditions combine to make the evidence theretofore taken unreliable and probably insufficient to support a permanent rate as of the date of the last order. Such evidence will be of assistance and its value should not be lost by dismissal. But, this does not justify a dismissal of the applications, but rather calls for additional hearings with due expedition in order that some rate can be established by evidence; nor does it justify the establishment of a permanent rate upon

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the existing record on the theory of res adjudicata.

The money judgment against Community for the amount of the overcollections was rendered following the making of the temporary rate into the permanent rate, and this upon the ground that the rate having been approved in our former opinion, was final from that time upon the principle of res adjudicata. We have heretofore pointed out why res adjudicata cannot apply to our former opinion on the legislative issues when subjected to the scrutiny of a court in a judicial review. The present order refers to the language of our former opinion, and infers from such language that disbursement of the overcollections was to be made at once. When the mandate was received, the Commission did not so interpret such language, but on the contrary treated the disbursement as being conditioned upon the continued obstinacy of the holding company in refusing access to its books and records, and to be postponed until the permanent rate was ordered in the event holding company offered the desired evidence. This interpretation was in keeping with the spirit of the former opinion, and was the equitable thing to do. We will adhere to equitable principles, and will vacate this judgment. We will leave the rendition of any judgment and the enforcement thereof to be decided when the Commission has made a permanent rate after a full hearing such as is contemplated by Art. 9, Const. of Okla. We have heretofore pointed out why we approved the temporary rate upon the record in the former appeal. We overlooked the failure of the Commission to make find-

ings of fact as to the Community. The findings of fact made as to Lone Star indicated prima facie that the reduced income from Community by virtue of the contemplated reduction of the expense for gas purchases by Community would not result in confiscation of Lone Star's property. The Commission on a theoretical basis found that this reduction in cost was an automatic savings to Community, and stated that additional savings might be found and ordered after further investigation. We disapproved the finding in so far as it was based upon theory only, and directed findings of fact on this point when all of the evidence was submitted. The Commission did not obey this direction. We quote from its present order:

"The Commission has before it the complete transcription of all the evidence taken in this case, upon which the Supreme Court based its opinion, no new oral testimony having been received since the cause was remanded to the Commission; but much documentary evidence on file in the Commission, and which are public records, the contents of which the Commission takes notice, has been considered by the Commission. The Commission also has before it the original brief filed by it, through its counsel, in the Supreme Court in the original appeal taken by the defendant companies. This brief is very comprehensive and exhaustive of the issues presented to the Supreme Court in the appeal herein. The Commission also knows the contents of its Order No. 6201, as made and entered herein on March 9, 1933. The Commission finds that said order contained a full and complete finding of facts and conclusions

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of law, the latter thoroughly documented and supported by citation of cases touching upon the questions raised and fully justifying the conclusions reached. It is true that some portions of that order are now inapplicable to the case at bar, on account of the setting aside of Order No. 6202, and the dismissal of this cause in so far as the Community and holding company is concerned, but that as a whole, said order reflects the present opinion of this Commission with the exceptions of those portions thereof which have become irrelevant and inconsistent with the conclusions of the Commission reached in the present case subsequent to the decision of the Supreme Court hereinabove mentioned. The Commission is of the opinion that the permanent rate which the Lone Star Gas Company charges the Community for natural gas delivered at the city gate of the various cities, towns, and communities, under the circumstances and facts as disclosed by the record in this case should be the same as the temporary rate as made and fixed in Order No. 6201, that is, a reduction from 40 cents per M. c. f. to 30 cents per M. c. f., or a 10-cent reduction per M. c. f. The Commission finds from the evidence that 30 cents per M. c. f. is a just, fair, and reasonable rate. The Commission further finds that it has jurisdiction and, that it is within its power, to order the Community to pass this 10 cents per M. c. f. reduction on to the burner-tip consumers of the Community, and, the Commission further finds and holds that the saving of 10 cents per M. c. f. to the Community is a reasonable item of expense to be set up on its books

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for gas purchased and that it is within the power of the Commission to continue in effect the duty and service of the Community to pass the 10 cents per M. c. f. saving on to its consumers, and that if for any reason it has neglected so to do then this order shall affirm and sustain the provisions of Order No. 6201, made and entered herein on March 9, 1933, in respect to the passing on to the consumers at the burner-tip the said 10 cents per M. c. f. The Commission hereby adopts the language of Order No. 6201 and readopts said Order No. 6201 in its entirety, subject to the exceptions herein noted, and the adoption of said order makes the same a part of this order by reference, to all intents and purposes as fully and completely as if the same were embodied herein, except, of course, the exceptions herein noted."

To now give full legal force and effect to a permanent rate based solely upon evidence insufficient in law to support a temporary rate, and to render a money judgment thereon to the extent of \$168,901.14, is to penalize Community to that extent without due process of law. In the case of Oklahoma Operating Co. v. Love (1920) 252 U. S. 331, 64 L. ed. 596, 40 S. Ct. 338, the fact that a public utility was facing a penalty of \$500 per day arising from orders of the Corporation Commission of Oklahoma which had not been reviewed and approved judicially was held to be sufficient reason for granting equitable relief. While we are passing upon this matter now judicially, as a court, nevertheless, our action upon the issues of due process under the Federal Constitution, Amendment 14,

COMMUNITY NAT. GAS CO. v. CORPORATION COM. OF OKLA.

is subject to review by the Supreme Court of the United States. The same principles which move it to restrain confiscatory legislative acts will likewise move it to reverse judicial acts having a like purpose and effect. The money judgment must be, and is hereby vacated.

[5] The regulation of the rates of public utilities for intrastate services rendered in Oklahoma rests with the state of Oklahoma. It is a legislative function, and by Art. 9, Constitution of Oklahoma, this power is vested in the Corporation Commission. This Commission may initiate proceedings, as well as hear pleas of the public or the utilities. The state of Oklahoma is a nominal party to all such proceedings by virtue of its interest in such matters, and in some appeals must be an actual party. Article 9, § 20, Const. of Okla. Therefore, the state of Oklahoma is a party, and by its agency is prosecutor, judge, and executioner. Nevertheless, because of these anomalous positions, the state of Oklahoma labors under a most solemn duty to see that justice is done all parties. We have heretofore pointed out the equitable principles which govern the final results. These same principles govern the tactics of the pursuit as well as the results. When a state enters a forum, it stands in no better position in respect of the procedure and final judgment than the humblest citizen of the state. In *Martin v. Barbour* (1891) 140 U. S. 634, 35 L. ed. 546, 11 S. Ct. 944, it is said that a state, having established a bureau for the performance of services for it, is bound to see that those over whom it exercises control are not misled by such agency. In *Indiana v.*

Milk (1882) 11 Fed. 389, it is said that the state is bound to use resolute good faith in dealings with individuals.

In Order No. 6201 (P.U.R. 1933C, at p. 69) the Commission recited that evidence which it desired was withheld from it. We desire to quote certain findings:

"57. That this order is in the nature of a temporary order.

"58. That were all the facts before this Commission, relative to the intercorporate relationship of the Lone Star Gas Company and the Lone Star Gas Corporation, a further reduction in the gate rate charged to the Community Natural Gas Company, by the Lone Star Gas Company at the city gate of the cities and towns served by the Community Natural Gas Company, located within the state of Oklahoma, might be justified.

"59. That a further investigation of the Lone Star Gas Corporation, the Lone Star Gas Company, and the Community Natural Gas Company, and the relationship existing between and among these concerns, may well justify an additional adjustment downward of the rates charged by the Community Natural Gas Company, for gas delivered to consumers at the burner-tip, in the cities and towns served by the Community Natural Gas Company, within the state of Oklahoma, in addition to the reduction of 10 cents per thousand cubic feet in the burner tip rate, resulting from a reduction of 10 cents per thousand cubic feet in the amount paid by the Community Natural Gas Company.

"60. That further consideration of the distribution properties of the Com-

OKLAHOMA SUPREME COURT

munity Natural Gas Company may justify a further reduction in the rate charged by the Community Natural Gas Company for natural gas at the burner tip. . . ."

In the briefs filed by the Commission and in its statements to the court in oral argument on the former appeal, we were told that from investigations of documentary evidence obtained from Community, it was thought that an investigation of the management services rendered Community by the holding company would disclose abuses of the relationship and furnish evidence to support orders regulating the amount of such charges as proper items of expense for Community to set up on its books. The obstinacy of holding company in refusing the Commission access to its books and records lent strength to the supposition which the Commission then entertained. We approved the Commission's position, and justified the legality of its demand for access to those books and records. At that time the issue of the Commission's power in that respect was new in Oklahoma, and pending the former appeal in this court the Supreme Court of the United States held that foreign corporations situated as holding company in this case must grant access to Public Service Commissions to its books and records as a part of the investigation of the rates to be charged by affiliated companies. See *Kansas State Corp. Commission v. Wichita Gas Co.* (1934) 290 U. S. 561, 78 L. ed. 500, 1 P.U.R.(N.S.) 433, 54 S. Ct. 321. This set the question at rest, and we so said in our opinion.

As stated hereinbefore, when the 22 P.U.R.(N.S.)

cause was remanded to the Commission, the companies appeared and offered access to such books and records in order that the Commission might pursue its investigation. The Commission's Order No. 2591 so states. In its orders now under consideration the Commission recites that it investigated such books and records. In this order it recites that no new oral testimony has been received since the hearings prior to the former appeal. No mention is made of what the books and records of holding company disclosed with regard to the abuses of the so-called management services. That part of the case is disposed of with the statement that no further investigation is necessary because of the orders being entered as to Community. To us this appears simply to be an evasion of the issue presented. In view of the directions of our order of remand, and in view of the prominent part that issue played in the former appeal, to now ignore it in this state of the cause is to change fronts.

We gave our approval to its theory and actions as steps in a legislative act, but we cannot now, on legal or equitable principles, approve a permanent rate order which ignores the issue. The evidence which the Commission procured from those books and records either sustained or disproved its supposition, and such evidence, whatever it is, must have consideration in any rate established by the Commission. The good faith which the state of Oklahoma owes parties in these hearings requires such.

The disposition of the appeal which we now make is taken in consideration

COMMUNITY NAT. GAS CO. v. CORPORATION COM. OF OKLA.

of the various aspects of the cause discussed hereinbefore.

In all of this we intend to, and do act in a judicial capacity as distinguished from a legislative capacity. We recognize and adhere to the law announced in the Ginners' Case, *supra*. We have examined the record to see whether Community has had a hearing consonant with legal processes and in keeping with its constitutional rights, and whether the evidence supports the findings. The courts in affording a judicial review of rate orders in respect of constitutional rights must exercise an independent judgment upon the weight of the evidence, but this does not prevent resort to nor reliance upon the findings of fact, and the sifting and classification of evidence by an informed and competent legislative agency. *St. Joseph Stock Yards Co. v. United States* (1936) 298 U. S. 38, 80 L. ed. 1033, 14 P.U.R.(N.S.) 397, 56 S. Ct. 720. The Constitution of Oklahoma, Art. 9, § 22, requires that on notice of appeal from rate orders the Commission shall prepare findings of fact and assign reasons for its actions. This has become a recognized procedure in Oklahoma, and its necessity has been established. *Atchison, T. & S. F. R. Co. v. State*, 47 Okla. 645, P.U.R. 1915E, 265, 150 Pac. 108. The Commission made no findings as to Community in Order No. 6201, and in the present order adopts the findings of No. 6201 as applicable to Community. Obviously, since they relate almost entirely to Lone Star, they cannot be pertinent to Community's rate base, except in an incidental manner.

The orders of the Commission:
(1) Transforming the temporary

rate into a permanent rate is vacated; (2) dismissing the applications for a reduction of rate, and striking Community's application for an increase in rates and docketing it as another cause is vacated; and (3) rendering judgment against Community for \$168,901.14, with interest, is vacated. Since these orders were erroneous, the status of the cause is unchanged, and the Commission is directed to proceed with the hearing on the various applications and to establish a permanent rate for Community.

Phelps, Corn, and Gibson, JJ., concur; Osborn, C. J., concurs in conclusion, but dissents in part; Hurst and Davison, JJ., concur in result; Riley and Welch, JJ., dissent.

OSBORN, Chief Justice (dissenting in part, but concurring in conclusion):

On July 10, 1934, this court handed down an opinion relating to a companion order in this rate-making proceeding. *Lone Star Gas Co. v. Corporation Commission* (1934) 170 Okla. 292, 7 P.U.R.(N.S.) 490, 39 P. (2d) 547. At that time I filed a dissenting opinion in which I pointed out the fatal defect of said proceeding in the jurisdiction of the Commission to make a valid rate order. It would serve no useful purpose to reiterate the matters discussed therein.

However, the power of the Corporation Commission to fix the rates of public utilities is found in the applicable provisions of the Constitution and statutes enacted pursuant thereto. By § 22 of Art. 9 of the Constitution, it is provided that the Corporation Commission shall take evidence and shall make a finding of facts predicated thereon, which finding of facts

OKLAHOMA SUPREME COURT

must justify the legislative order fixing the rates so made. This finding, as declared by the Constitution, is to be taken by this court as "prima facie just, reasonable, and correct." At the time of the previous order, no such finding of facts had been made as to the Community Natural Gas Company. At the time of the making of the order on appeal here, the Corporation Commission made no such finding of facts, nor had it theretofore made any such finding of facts as to the Community Natural Gas Company, the company affected by the order. In the absence of such finding of facts, the Corporation Commission was wholly without authority or jurisdiction, legislatively, to fix such rate, and to sustain such order of

the Corporation Commission would be clearly and manifestly erroneous.

We have many times said that the Corporation Commission must act strictly in conformity to the provisions of the Constitution, and unless it does so its action is clearly erroneous. No power exists in this court to waive such constitutional requirement. The people have a right to expect the Corporation Commission to so act, and it is most unfortunate that relief to the people can be delayed or thwarted by a failure to follow the plain, simple, mandatory requirements of the Constitution.

I concur in the conclusion of the majority opinion, but dissent as to much of the reasoning contained in said opinion.

CALIFORNIA RAILROAD COMMISSION

Re Pacific Gas & Electric Company

[Decision No. 30345, Application No. 20992.]

Certificates of convenience and necessity, § 73 — Exercise of rights — Extent of authority.

1. The exercise of franchise rights should be authorized as to territory now served by an electric utility and as to extensions made in the normal course of business as contemplated by § 50(a) of the Public Utilities Act, on an application for a certificate of public convenience and necessity to exercise rights granted by a franchise which covers an entire county when the utility does not serve throughout the entire county; the Commission cannot foretell future conditions or make a finding now that public convenience and necessity require the exercise of such franchise in its entirety, p. 528.

Monopoly and competition, § 2 — Authority to exercise franchise rights — Protection of existing utilities.

2. Existing utilities should be protected as to territory now being served by them and also as to extensions made in the normal course of business, and an applicant for a certificate of public convenience and necessity to exercise rights granted by a franchise which covers an entire county should not be authorized to exercise such franchise rights as to such territory or

RE PACIFIC GAS & ELECTRIC CO.

extensions, but the Commission reserves the right to adjudicate disputes as to competitive territory in appropriate future proceedings, p. 528.

[November 22, 1937.]

APPPLICATION by a gas and electric utility company for authority to exercise certain franchise rights; certificate granted in modified form.

APPEARANCES: R. W. DuVal, for applicant; R. C. Bragg and Frank E. Powers, for Vallejo Electric Light and Power Company.

WAKEFIELD, Commissioner: Pacific Gas and Electric Company requests a certificate of public convenience and necessity under § 50(b) of the Public Utilities Act authorizing the exercise of the rights and privileges granted to it by Ordinance No. 153 of the board of supervisors of the county of Solano adopted on August 3, 1936, a copy of which is attached as Exhibit "A" to the application. Public hearing was had at San Francisco, California, on April 28, 1937. No one appeared to protest the granting of the application.

It appears from the record that for more than thirty-five years last past, applicant or its predecessors in interest have been rendering electric service in the county of Solano, and have used the public highways therein under and pursuant to the following franchises:

Ordinance			
No.	Adopted	Expiring	Grantee
45	July 16, 1900	July 16, 1950	Bay Counties Power Co.
71	June 3, 1907	June 3, 1957	E.D.N. Lehe
79	June 3, 1912	June 3, 1962	Great Western Pwr. Co.

Applicant now renders electric service in a large portion of the county of Solano but is not rendering such serv-

ice in a minor portion thereof. Service of a like character is now being rendered by Vallejo Electric Light and Power Company in the city of Vallejo and in certain territory immediately adjacent to said city.

It is of record that applicant applied to the board of supervisors of the county of Solano for the franchise granted by Ordinance No. 153 primarily to enable applicant to continue to qualify its first and refunding mortgage bonds and legal investments for savings banks and trust funds in as many states as possible. Applicant has outstanding \$267,153,000 of first and refunding mortgage bonds. The most recent issue of such bonds matures on June 1, 1966. The bonds are now qualified as legal investments in savings banks and trust funds in the state of New York and some other states. The law of the state of New York, it is said, permits investments by savings banks in bonds of gas and electric corporations provided, among other things, that "such corporations shall have all franchises necessary to operate in territory in which at least 75 per centum of its gross income is earned, which franchises shall either be indeterminate permits or agreements with, or subject to the jurisdiction of a Public Service Commission or other duly constituted regulatory body, or shall extend at least five years beyond the maturity of such bonds."

CALIFORNIA RAILROAD COMMISSION

The laws of some other states are somewhat similar. The franchise referred to herein is essential to meet such statutory requirements.

Applicant has stipulated that it, its successors, or assigns, will never claim before the Railroad Commission or any court or public body, any value for said franchise in excess of the actual cost thereof, which is \$347.13 exclusive of the fee of \$50 for the filing of the present application.

[1, 2] It should be noted this is an application under § 50(b) of the Public Utilities Act for a certificate of public convenience and necessity to exercise rights granted by a franchise which covers the entire county. Applicant does not now serve throughout the whole county. The franchise is for a term of fifty years. The Commission cannot foretell future conditions or make a finding now that public convenience and necessity require the exercise of such franchise in its entirety. However, the exercise of such rights should be authorized as to territory now served by applicant and as to extensions made in the normal course of business as contemplated by § 50(a) of the Public Utilities Act. In this proceeding consideration must also be given to the fact that at the present time Vallejo Electric Light and Power Company renders electric service within the county. Existing utilities should be protected as to territory now being served by them and also as to extensions made in the normal course of business, and applicant should not be authorized to exercise franchise rights as to such territory or extensions. Should the situation arise in the fu-

ture where more than one utility desires to enter into the same locality or territory, the Commission reserves the rights to adjudicate such dispute upon the facts disclosed in an appropriate proceeding and to modify the present order or to make such order prescribing the terms and conditions under which service may be rendered as may be warranted by the record in such future proceeding.

ORDER

It is found as a fact that public convenience and necessity require, and Pacific Gas and Electric Company is hereby granted a certificate to exercise the rights and privileges granted to it by Ordinance No. 153 of the board of supervisors of the county of Solano, as to the territory now being served by it and as to extensions to its existing system made in the normal course of business as contemplated by § 50 (a) of the Public Utilities Act provided, that the rights and privileges granted by such franchise shall not be exercised in territory served by the existing system of Vallejo Electric Light and Power Company nor from future extensions thereof made in the normal course of business as contemplated by § 50(a) of the Public Utilities Act and provided further that Decision No. 4438 dated July 3, 1917, in Application No. 2945 and Decision No. 10700 dated July 12, 1922, in Case No. 1643 (P.U.R.1923A, 1) of this Commission shall in no way be affected by this order and shall remain in full force and effect.

This order shall be effective immediately.

ACCEPTANCE!

Engineering executives purchase equipment on demonstrated performance. That Vulcan Soot Blowers are on the preferred list of engineers who buy because of demonstrated lowest maintenance sound engineering and the ruggedest construction ever built into Soot Blowers, is evidenced by the following partial list of representative contracts installed or sold in 1937.

Allis Chalmers Co. West Allis, Wis.
Ames, City of Ames, Iowa
Atlantic Refining Co. Atreco, Texas
Baltimore Transit Co. Baltimore, Md.
Bethlehem Steel Co. Sparrows Point, Md.
Chain Belt Company Milwaukee, Wis.
Columbia Enameling & Stamping Co., Terre Haute, Ind.
Container Corporation Carthage, Ind.
Continental Diamond Fibre Co. Newark, N. J.
Crosley Radio Corporation Cincinnati, Ohio
Edora Gold Mines Port Hope, Ontario
Egls, Joliet & Eastern R. R. Co. Gary, Ind.
Formica Insulating Co. Cincinnati, Ohio
Globe Steel Tubes Co. Milwaukee, Wis.
Hamilton Coke & Iron Co. Hamilton, Ohio
Helwig Silk Dyeing Co. Philadelphia, Pa.
Hudepohl Brewing Co. Cincinnati, Ohio
Jose Arechabala Sociada Cardenas, Cuba
Kaukau Sugar Co. Honolulu, Hawaii
Kendall Refining Co. Bradford, Pa.
Keystone Public Service Co. Oil City, Pa.
Latonia Refining Co. Latonia, Ky.
Lehigh Portland Cement Co. Oglesby, Ill.
McAndrews & Forbes Camden, N. J.
M Street Heating Plant Washington, D. C.

MacSim Bar Paper Co. Otsego, Mich.
Mendocino State Hospital Mendocino, Calif.
Metropolitan Edison Co. Reading, Pa.
Municipal Power Plant Rochester, Minn.
N. Y. State Electric & Gas Co. Dresden, N. Y.
Ohio Power Co. Windsor, W. Va.
Pennsylvania Electric Co. Sewart, Pa.
Ralston Purina Company Battle Creek, Mich.
Republic Oil & Refining Co. Texas City, Texas
Republic Steel Co. Thomas, Ala.
Rochester & Pittsburgh Coal Co. Lucerne, Pa.
Schervier Hospital New York City
Sherwood Refining Co. Warren, Pa.
Sloan Blabon Co. Philadelphia, Pa.
A. E. Staley Mfg. Co. Decatur, Ill.
Thilmany Pulp & Paper Co. Kaukauna, Wis.
Tide Water Power Co. Wilmington, N. C.
Timken Roller Bearing Co. Columbus, Ohio
United Refining Co. Warren, Pa.
U. S. Military Academy West Point, N. Y.
Vacuum Oil Co. Paulsboro, N. J.
Village of Hinsdale Hinsdale, Ill.
Washington Gas Light Co. Washington, D. C.
Westinghouse Elec. & Mfg. Co. Mansfield, Ohio

Vulcan Soot Blower Corporation does not hold down a price. Vulcan builds into their equipment thirty-three years of experience; built by highly skilled engineering and plant personnel of long service, using the highest quality material that hard exacting service has demonstrated is the most practical for its purpose. The result is trouble free, long years

of service, making unnecessary frequent servicing—and when service is required, skilled field engineers on their rounds, offer it gladly to maintain your Vulcan equipment in top condition. Just ask the Vulcan Sales or Field Engineer WHY Vulcan build into their equipment the most rugged, trouble free, lowest maintenance you can buy.

VULCAN SOOT BLOWER CORP., Du Bois, Penna.

Industrial Progress

Utility Advertisers Offered Cash Prizes by A.G.A.E.M.

ADVERTISING managers of gas utilities and combination companies operating in the United States and Canada whose local advertising activities best tie-in with the current national advertising campaign of the American Gas Association, will be awarded substantial cash prizes in a contest sponsored by the Association of Gas Appliance and Equipment Manufacturers. This competition, which opened officially March 1st and will close at midnight on December 31st, was announced by Merrill N. Davis, president of the Association and executive vice-president of the S. R. Dresser Manufacturing Company, of Bradford, Pa.

The contest was created as a means of stimulating greater interest on the part of local companies in the American Gas Association's national advertising campaign, and to induce these companies to tie-in more closely with it. The objective of the gas industry's national advertising program which is being conducted under the direction of the American Gas Association's advertising committee, of which T. J. Strickler is chairman, is the "promotion of gas as a modern fuel for domestic, commercial and industrial purposes." Consumer, trade and professional magazines with a combined circulation of about 18,500,000 are carrying this national advertising.

Rules prepared by the contest committee, of which F. E. Sellman of New York, treasurer of the Association of Gas Appliance and Equipment Manufacturers, is chairman, provide that all forms of local advertising such as newspaper copy, window displays, direct mail and other promotional literature, radio, magazine space, and car-cards and outdoor billboard advertising are eligible for entry in the competition.

Westinghouse Reports Progress

THE Westinghouse Electric & Manufacturing Company had one of its best years in 1937, despite widely varying business activity, declared A. W. Robertson, chairman, in the annual report to stockholders.

Orders entered, sales billed and net income were all above 1936. The company carried into 1938 unfilled orders approximately 24 per cent greater than a year ago.

Orders received amounted to \$229,540,061; an increase of 25 per cent over 1936 and second only to the record of \$240,220,555 orders received for the year 1929.

Sales billed, which were also slightly less than in 1929, totaled \$206,348,307, an increase of 33 per cent over 1936.

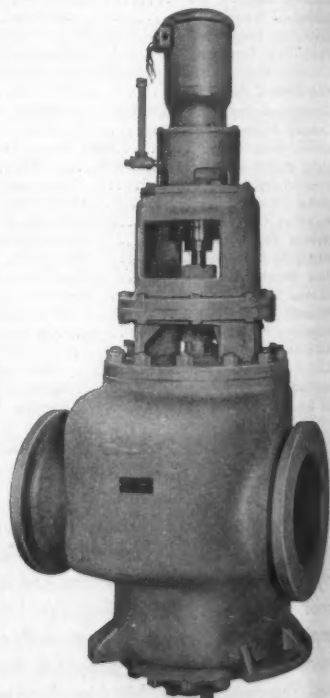
MAY 12, 1938

Unfilled orders at the end of the year amounted to \$60,298,087, compared with \$48,490,919 at December 31, 1936.

In 1937, in view of excellent earnings for the year and in recognition of the cooperation and interest of the employees, a special payment of \$745,099 to 51,181 employees was made, based upon \$1.00 for each year of service plus \$5.00—the same formula as used in the Fiftieth Anniversary Year of 1936.

Elliott Produces Automatic Self-Cleaning Strainer

THE Elliott Company, Jeannette, Pa., announces the Elliott Type K Self-Cleaning



Type K Motor-Operated Self-Cleaning Strainer

Strainer. A detailed description of the new strainer is given in Bulletin A-8 recently issued by the company.

The self-cleaning strainer is applicable and preferable where a relatively large quantity of



FINGERS ON THE PUBLIC PULSE

ND THAT

It pays to feature

ROBERTSHAW

Thermal Eye OVEN-HEAT-CONTROL

Smart merchandising men who "feel out" the public's taste know that women want their new ranges to be equipped with Robertshaw Oven-Heat-Control. That's why, in retail ads, these men feature ROBERTSHAW — picture ROBERTSHAW — headline ROBERTSHAW.

The clippings shown on this page show only a very few of the hundreds of retail store ads that play up the name.

If you manufacture gas ranges — remember how retail stores spotlight the Robertshaw-equipped product. If you sell gas ranges remember that the name ROBERTSHAW in your ads helps close many a sale.



ROBERTSHAW THERMOSTAT COMPANY • Youngwood, Penna.

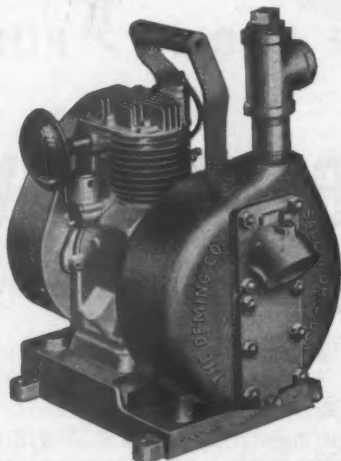
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fine dirt, sand, etc., is to be removed from water which already has passed through a traveling screen or conventional twin or single strainer. Under such conditions a twin strainer is not practical, due to the enormous basket area which would be required to prevent almost continuous changing and cleaning of the baskets. The self-cleaning strainer will deliver a continuous flow of clean water under these conditions with no more attention than is required by a motor-driven centrifugal pump.

"Self-Priming" Pumps

THE Deming Company of Salem, Ohio, has perfected a new line of completely automatic "self-priming" centrifugal pumps. The new pumps are an addition to Deming's standard line of centrifugal pumps.

One noteworthy feature of the new pumps is rapid and positive priming, which is accomplished without the use of tanks, built-in



Portable "Self-Priming" Centrifugal Pump

strainers, hand operated controls or other mechanisms. There is nothing to clog or interfere with the free flow of water. Every priming operation is completely automatic and dependable with positive automatic shut-off for recirculating the water.

The new Deming "self-priming" centrifugal pumps are available in electric motor and belt driven units as well as gasoline engine drives. Both stationary and portable units are included in the line. The electric motor and belt driven units cover a range of 16 capacities from 10 to 300 gallons per minute.

Complete details about the new line of Deming "self-priming" centrifugal pumps are included with performance tables in Bulletin No. 3000. Copies of this new bulletin are available upon request from The Deming Company, Salem, Ohio.

MAY 12, 1938

Unit Air Conditioner

A COMPLETELY new type of unit air conditioner for residential, office, hotel, hospital and similar uses is announced by General Motors' Delco-Frigidaire Conditioning Division.

The new room conditioner is the first air conditioning equipment to incorporate the hermetically sealed, long-life, low-operating cost meter-miser which does away with belts, pulleys, stuffing boxes, connecting rods and oil pumps, according to the announcement.

As advanced in design as it is in mechanical principle, the new unit looks much like a console radio cabinet of extraordinarily compact size. It has finger-tip dial control, and cools, dehumidifies, cleans, circulates the air and provides year 'round ventilation. It is portable and requires no plumbing and no electrical or other installation work except the connecting of the power circuit and the fitting of an adjustable window section. It is priced at \$399.50 completely installed.

Describes Splicing Method

A BULLETIN issued by The National Telephone Supply Company, 5100 Superior Ave., Cleveland, Ohio, describes a new and better way to splice aluminum cable steel reinforced by using national Nicopress sleeves and special No. 51 Nicopress Tool.

The use of these products, the manufacturer claims, saves time and expense and assures strong, tight joints that are moisture proof.

The bulletin illustrates and describes this method of splicing aluminum steel cable reinforced. Prices and samples may be obtained from the manufacturer.

"Rustnaught" Paint Coating

RUSTNAUGHT, a paint coating for all iron, steel and other metal surfaces requiring protection against rust and electrolysis, is the subject of a booklet issued by The Billings-Chapin Company, Cleveland, Ohio. Specifications for use of Rustnaught are given, together with a list of a few prominent users of this product which includes a number of public utility companies.

Fixture Group Organized

THE National Lighting Fixture Guild was recently organized at a meeting of fixture dealers and jobbers in New York City.

The objectives of the Guild include, among other things, public education on the indispensability of adequate outlets to assure efficient lighting, and the decorative values of properly designed fixtures plus a program to increase the demand for ceiling fixtures and wall brackets. Steps will be taken to enlist the coöperation of the public, architects, builders and decorators to include in building estimates suitable appropriations for outlet and fixture installations to assure correct

When You're Between the Devil and the Deep Sea

Assuredly an uncomfortable position, but one in which many utilities find themselves; faced with mounting operating costs on one hand, and, on the other, the insistent demand that present efficient, comprehensive service be maintained, and extended, at lower rates.

One unfailing way to reduce costs is to safeguard earnings at your most vulnerable point, by completely eliminating losses caused by current diversion. This can be accomplished immediately and permanently through the use of CB new sequence service entrance equipment to prevent the staggering, needless losses caused by tampering and diversion.

Scores of thousands of CB meter enclosures are annually saving their slight cost many times over, not only through prevention of current diversion, but through the time and labor economies they effect in installation.

SERVICE ENTRANCE EQUIPMENT

by Corcoran-Brown includes the widely used weather-proof, tamper-proof CB 14 meter enclosure in aluminum (illustrated) and drawn steel for indoor and outdoor use; meter test devices; meter service and entrance switches; range and water heater switches; meter cabinets; special equipment for specific requirements and other products. Complete data on CB equipment are found in Bulletins 57, 58, 60 and 61. Send for copies today.



Electrical Department

CORCORAN-BROWN LAMP DIVISION

THE ELECTRIC AUTO-LITE COMPANY

1900 Spring Grove Avenue

Cincinnati, Ohio



indoor lighting. A broad-gauged program is contemplated on the creation of more saleable fixture designs from the standpoints of lighting, styles and decorative values. Determined effort will also be made to eliminate varied trade practices that have proved harmful to the industry.

Tentative lines of activity were outlined for eight standing committees on Membership, Publicity, Manufacturers, Architects, Utilities, Education, and Ethics.

George E. Henry has been appointed business secretary of the group, with headquarters in International Building, 630 Fifth Avenue, New York City.

The following officers were elected for the current year: President, A. L. Oppenheimer, Enterprise Electric Lighting Fixtures, Inc., Cleveland; Vice President, John Donovan, Service Electric Manufacturing Co., Boston; Vice President, Harold B. Carpenter, Whiffen Electric Co., White Plains, N. Y.; Secretary, W. Henry Dowdy, Dowdy Electric Co., Roanoke, Va.; Treasurer, Morris Sklar, Morris Sklar Company, Philadelphia. Annual dues were voted at \$25 per membership by the 35 dealers and jobbers present, initiation fee being waived for the time being.

Non-Rusting Guy Strand

COPPERWELD non-rusting guy strand is the subject of a recent bulletin issued by The Copperweld Steel Company, Glassport, Pa. The bulletin suggests a "rust survey" of utility company lines, pointing out that rust is often at work in the most unexpected places and mentions, for example, rural areas near industrial centers which are often exposed to severe but unsuspected rusting attacks.

A table of physical properties of high strength and extra high strength Copperweld guy strand is given in the bulletin. Facts about the cost of non-rusting construction with Copperweld strand will be sent upon request to the manufacturer.

New Pressure Lubricator

ON bearings, gears and other moving parts of machinery where oil is needed, the Acco-Morrow pressure lubricator, recently announced by the American Chain & Cable Company, Inc., solves a perplexing and costly industrial problem by supplying lubrication at pressure up to 1000 pounds.

Such pressure lubrication flushes out grit and dirt from a machine and at the same time forces oil into bearings.

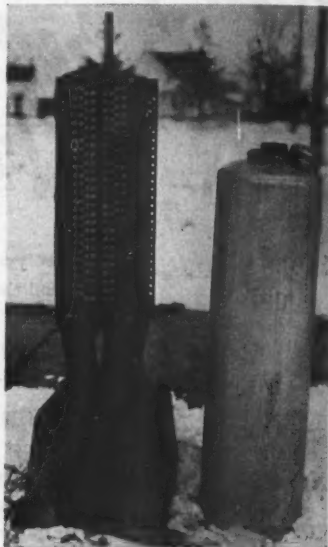
Dodge Appoints Purves

W. J. O'NEIL, vice-president and general manager of the Dodge Division of the Chrysler Corporation, has announced the appointment of W. M. Purves as general sales manager, succeeding A. vanDerZee, recently appointed a vice-president of the corporation. Mr. Purves came up through the sales ranks of Dodge before purchase by Chrysler.

MAY 12, 1938

New Telephone Device Uses Malleable Iron

A NEW device designed to eliminate the telephone pole and overhead transmission of wires and cables has been developed by the Northern Iowa Telephone Company,



Malleable Iron Standard for Telephone Device

Cresco, Iowa, and experimental installations are said to have revealed several worth while advantages.

The unit consists of a malleable iron standard to which panel boards are attached, a malleable iron base which is fastened to a concrete foundation, and a protecting cylindrical cover. The cable enters the container from conduits or covered trenches, and the cable ends are attached to the insulator panel. From the panels individual or group cables are taken underground to residences or business buildings.

5000-Volt Indoor Transformer

GREATER accuracy, higher insulating qualities, and finer construction are features claimed for the new type JW-1, 5000-volt indoor current transformer developed by the General Electric Company. The new product replaces the WF-12 in the company's transformer line.

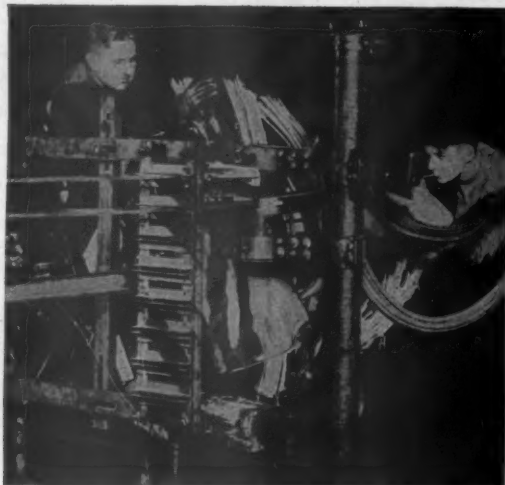
Use of a newly developed high-permeability steel and the patented Wilson scheme of compensation in the JW-1, combined with close manufacturing control, and narrower test limits, make for greater uniformity in the

Power and Distribution TRANSFORMERS

Painstaking Workmanship

.. one of many
reasons for
Pennsylvania
reliability

Every step in fabrication is characterized by painstaking workmanship and careful supervision. Design, construction, inspection and tests are all conducted in our own plant, resulting in the co-ordination of every detail, and in the assurance of reliability in every transformer. Write for Bulletin 340.



Heavy secondary leads electro-brazed directly to heavy copper bars by a process which results in a joint as reliable as the copper itself. This operation, being practically instantaneous, prevents conducting of heat from joint to interior of winding.

Write for your copy
of Bulletin 340



Pennsylvania TRANSFORMER CO.

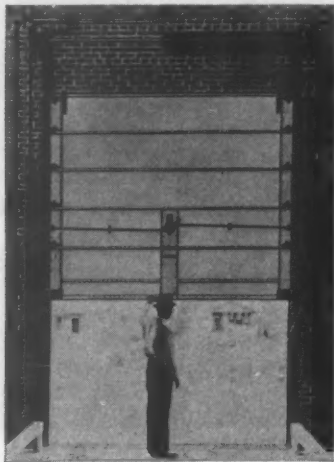
1701 ISLAND AVENUE, N.S.
PITTSBURGH • PENNA.

new transformer. Ratio and phase-angle errors are reduced to a point where they may be disregarded for even the highest grade of metering. Accuracy of the new JW-1 conforms to the highest NEMA rating of $\frac{1}{2}$ X, $\frac{1}{2}$ Y, and $\frac{1}{2}$ Z at 60 cycles.

New Vertical Sliding Door

ANNOUNCEMENT has just been made by the Kinnear Manufacturing Company of Columbus, Ohio, of a new, heavy-duty, all-steel door that is economically priced and suited for industrial or commercial application. It is known as a "Vertical Sliding All-steel Rol-Top Door."

The door proper is made of heavy steel sections, rolled from copper-bearing steel



Vertical All-Steel Door

that has been galvanized by the hot dip process. Though remarkably strong, they are given additional rigidity by the application of steel reinforcing plates at all points where hardware is applied.

The ends of these sections are provided with especially designed, hardened steel, ball-bearing rollers that travel in steel track that are applied to the jamb and extend vertically along the wall. At the top of these vertical tracks is placed a torsion spring counterbalance, composed of an oil-tempered helical spring, operating around a solid steel shaft. The door proper is connected to this counterbalance mechanism by heavy plow steel cable, which operates over drums at the end of the counterbalance shaft.

Locking is accomplished by a cylinder lock, operating in conjunction with lock bars that engage in slots in the steel track.

Besides the obvious operating convenience, and economy of space this door provides, it is remarkably resistant to weather, abuse and fire. It is also vermin-proof and will not warp, pull apart or sag. It is also built in any practical size and may have any number of sections arranged for sash.

MAY 12, 1938

General Electric Publishes Instrument Brochure

"WHEN You Can Measure," a 32-page brochure recently published by the General Electric Co., tells in brief the contributions of General Electric engineers and scientists to the important art of measurement. This attractive, beautifully printed publication describes in pictures and in words the story of how instruments are designed, constructed and tested in the "headquarters for electrical measurement."

Every development in electricity has grown out of experiments in which instruments played a major part. The incandescent lamp, the electric motor, electric household appliances, radio—none of these commonplaces of modern living would have been possible without the imposing array of ingenious, sensitive, accurate measuring devices engineers have perfected.

Since measurement, in its final form, depends upon comparison with some carefully chosen standard, a section of the booklet is given over to a description of the company's standards of voltage, resistance, time, and temperature.

Cable Insulating Compound

AN oil-resistant filler compound that will not flow at the usual cable-line operating temperatures, and that is adequately fluid at the recommended pouring temperatures, has recently been developed by the General Electric Company.

This material, No. 1332, is particularly suited to use in cable joints and terminals requiring a "solid" filler which must remain stable, physically and electrically, when in contact with insulating oils. By virtue of its oil-resisting qualities, this compound will retain its low dielectric power-factor characteristic and its physical permanence even under conditions that prove harmful to other compounds.

New Line of Electrodes

A COMPLETE line of shielded-arc welding electrodes—claimed by the manufacturer to be quieter in operation, faster in welding time, produce finer bead appearance, and have greater adaptability per rod—is offered by The McKay Company, Pittsburgh, Pa.

The makers state that, while the new electrodes are of an improved type, no changes in customary operating practice are required.

In accounting for their ability to produce a line of "precision" electrodes of higher efficiency, the company gives three reasons:

- (1) A new plant at York, Pa., equipped with newly designed machinery;
- (2) Scientific development of the electrodes by a group of factory experts;
- (3) Supplemental work of an outstanding, independent research organization.

A folder describing the line of electrodes may be obtained by writing the Pittsburgh office of The McKay Company.

400 LINE **EGRY** **HANDIPAK**

THE WORLD'S FINEST
PORTABLE
REGISTER



telephone switchboard, or
at desk, the Handipak will
found indispensable.



writing a delivery ticket
and getting a receipt, the
Handipak saves time and
gives complete control over
usage of tools, materials,
copies, parts.

THERE are many uses for the EgrY Handipak by Utilities. This efficient, light weight, portable register goes where business goes and makes records on the spot! It is indispensable in tool cribs to record, in multiple copies, the delivery and return of tools; in the stockroom for the issuance of parts and supplies; in the garage for the delivery of gas, oil and service; at the order desk and the telephone switchboard; executives use the Handipak for writing personal memoranda—wherever multiple copies of any record must be written. The Handipak is made in seven sizes for forms 4-5/16"x5"; 4-5/16"x6-1/2"; 4-5/16"x8-1/2"; 5-3/4"x6-1/2"; 5-3/4"x8-1/2"; 8-1/2"x6-1/2"; 8-1/2"x8-1/2". Easy to write on as a pad of paper. All forms kept in perfect alignment. A compartment is provided within the register for filing audit copies.

EGRY SYSTEMS SERVICE DIVISION

Without an equal in the industry, the EgrY Systems Service Division will gladly assist in developing new systems, in designing new forms to meet special requirements; to suggest changes to make present systems more effective through the use of EgrY equipment. The services of this division are available without cost or obligation.

EgrY service and sales are nation-wide. Consult classified telephone book for name of sales agent in your city or write to Dayton for information. Address Department F-512.

The EGRY REGISTER Company
Dayton, Ohio
SALES AGENCIES IN ALL PRINCIPAL CITIES

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YOU CAN **EXPECT MORE**
FROM A **STANLEY**
ELECTRIC TOOL



A
**MONEY SAVER
FOR EQUIPMENT
MAINTENANCE**

STANLEY No. 77 ELECTRIC DISC SANDER

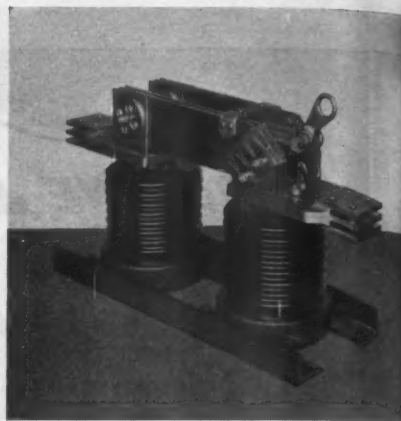
Ideal for equipment repair and maintenance work, this 7" Stanley Disc Sander will handle the toughest cleaning or sanding job with ease and speed. Strong, sturdy construction, ball bearings throughout, insure trouble-free, long life. Compact — it gets into even the close places. Powered with Universal type motor for continuous, economical operation. A Stanley quality tool in every respect.

**ASK THE STANLEY DISTRIBUTOR FOR
A DEMONSTRATION; OR WRITE TO US
TODAY FOR DESCRIPTIVE CATALOG!**

STANLEY ELECTRIC TOOL DIVISION
The Stanley Works
134 Elm St., New Britain, Conn.

STANLEY ELECTRIC TOOLS

"COST LESS PER YEAR"



R&I HI-PRESSURE CONTACT INDOOR SWITCH

Years of successful experience with R Pressure contacts on outdoor equipment has proven their advantage and effectiveness. Their application to the Type "HPS" Indoor disconnecting switch shown above has resulted in much higher efficiencies along with easier operation. Concentrated contact area under high pressure assures a clean metal to metal contact at all times.

All switch parts are non-ferrous, brushed and lacquered for appearance. Note that all switches have double blade construction for strength and rigidity.

**RAILWAY & INDUSTRIAL
ENGINEERING CO.**
GREENSBURG, PA.

Sales offices in principal cities

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RILEY PULVERIZERS

in Central Stations

Plant after plant in the Public Utility industry has swung to Riley pulverizers . . . definitely establishing Riley as one of the leaders

A few Public Utilities using Riley Pulverizers . . .

Union Electric Light & Power, Cahokia . . . Repeat Order
 Edison Electric Illuminating Co., Boston . . . Repeat Order
 Hartford Electric Light Co., Conn. . . . Repeat Order
 Potomac Electric Power Co., Washington, D. C.
 Oklahoma Gas & Electric Co. . . . Repeat Order
 Stamford Gas & Electric Co., Conn.
 City of Springfield, Ill.
 City of Tacoma, Wash.
 Savannah Electric Co., Georgia
 Dubuque Electric Co., Iowa
 Central Iowa Power & Light Co.
 Lynn Gas & Electric Co., Mass.
 Upper Michigan Power & Light Co.

RILEY STOKER CORPORATION

WORCESTER, MASS.

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ST. LOUIS	CINCINNATI	HOUSTON	CHICAGO	ST. PAUL	KANSAS CITY	LOS ANGELES	ATLANTA

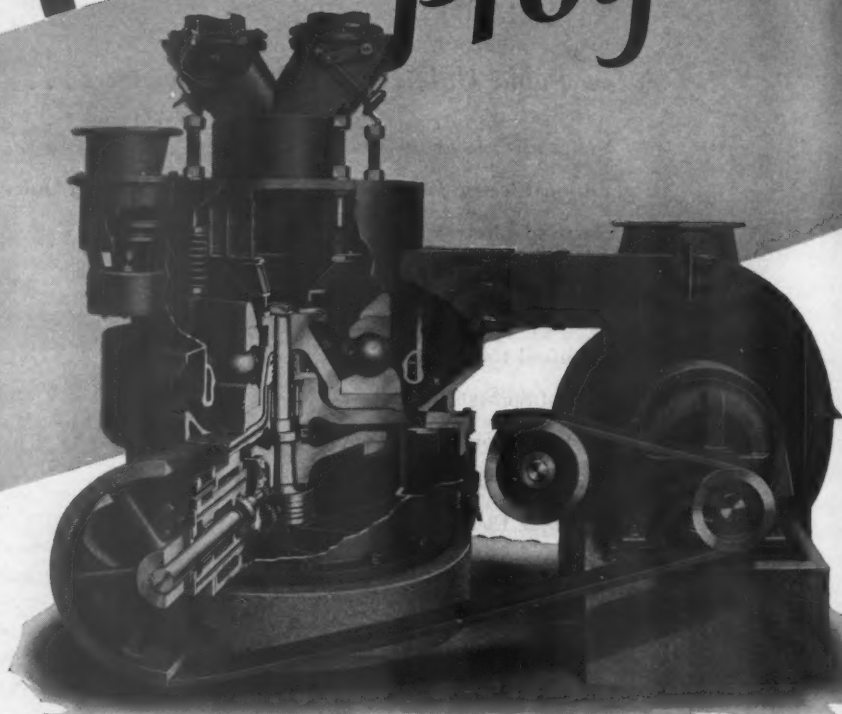
COMPLETE STEAM GENERATING UNITS

BOILERS - SUPERHEATERS - AIR HEATERS - ECONOMIZERS - WATER-COOLED FURNACES
 PULVERIZERS - BURNERS - MECHANICAL STOKERS - STEEL-CLAD INSULATED SETTINGS

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PULVERIZER

Progress



B&W Type E Pulverizer—the outcome of the successful application of the ball-bearing grinding principle to well over 500 B&W Pulverizers since 1929. Its construction differs from that of Type B Pulverizers of comparable size mainly in the use of bottom drive and rotating bottom ring. Coal drops from the feeder into the grind-

ing zone—flows radially outward between heated grinding elements—fines picked up by the air stream as soon as formed and further dried by the heated air—classified in the pulverizer—discharged through the top.

Capacities—to 13 tons per hour. Other B&W Pulverizers for capacities up to 50 tons per hour.

THE BABCOCK & WILCOX

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brings these *New* Advantages--

30% Less Power

Power consumption of pulverizer and fan as low as 9 kw-hr. per ton under standard conditions, with Pittsburgh seam coal pulverized to pass 65 per cent through 200 mesh.

Operation Simplified

Lubrication fully automatic. Greater accessibility and ease of adjustment.

Less Noise

Initial installation operates at 83 decibels at three feet, which in pulverizers is very quiet operation.

Maintenance Reduced

Due to better material in grinding balls, resulting in longer life for balls and grinding rings.

Plus...

—All these Service-Proved Features of the original Ball-Bearing Pulverizer.

RELIABILITY

Pulverizes coal of any grindability or moisture. Delivers full capacity throughout life of grinding elements. Pulverizer not damaged by tramp iron or pyrites. System provides steady, controlled flow of coal from bin to burners. One point of control for pulverizer, feeder, and fan. Fan handles clean air only—reduces outage for repairs.

EFFICIENT COMBUSTION

Consistent high fineness of coal. Uniform mixture of coal and air to burners. Adaptable to full automatic control to maintain high average efficiency.

SAFETY

Safe starting—from rich mixture provided by fuel storage in pulverizer. Puffs or flare backs minimized by steady flow of coal through system.

AUTOMATIC CONTROL

Automatic variation of coal feed according to air flow. Air flow, and accordingly the pulverizer, adaptable to automatic boiler control.

THE BABCOCK & WILCOX COMPANY
85 LIBERTY STREET NEW YORK, N. Y.

WILCOX COMPANY

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For Telephone, Control Bus and All Exide Stationary Services



CHLORIDE BATTERIES

FOR more than forty years the unequalled dependability, power and life of the Exide Chloride Battery has made it the choice of telephone, power and railroad companies—not in this country alone but throughout the world.

The Exide Chloride is but one of the great family of Exide Batteries that are designed for specific purposes. However it is the one battery which, by reason of its unusual construction—and consequent superior performance—is most strongly recommended by us to the utility companies for stationary service.

We'll be glad to send you more complete details about this exceptional battery on request, or to help you solve any other battery problem.

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia

The World's Largest Manufacturers of Storage Batteries for Every Purpose

Exide Batteries of Canada, Limited, Toronto



**The Larchmont
L&H Electric—No. 8714A**

Divided top. Extra large oven with automatic temperature control. Multi-Speed Calrod unit. One piece top and back-guard. Beautiful white porcelain enamel finish.

**A. J. LINDEMANN
& HOVERSON CO.**

Milwaukee, Wis.

The New 5 Heat **MULTI-SPEED** L&H Calrod Unit

• TOP SPEED • HALF SPEED •
• QUARTER • THRIFT • WARM •

Here's the fastest electric cooking unit—and the most flexible. "Warm" setting keeps food at warming temperature without drying out their goodness. Three speeds in between provide economical heat for all intermediate cooking operations. "Top Speed" brings amazingly fast cooking service. One Multi-Speed L&H Calrod unit is furnished on most L&H Electric Ranges.



Advanced
ELECTRIC RANGES

II

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is why you get quick, easy installation,
longer life and greater safety with

J & L SEAMLESS STEEL BOILER TUBES

in boilers get the shut-down habit, Jones & Laughlin Seamless Steel Boiler Tubes will help get them back on the job in a hurry. Jones & Laughlin Tubes roll in faster and then stay put. They keep your boilers working efficiently and economically because every length of Jones & Laughlin Tubes has built into it an extra margin of length, safety and high ductility. The dependable strength and durability of J & L Tubes mean that boilers equipped with them stay on the job longer and with fewer costly shut-downs. The next time you need boiler tubes, call your Jones & Laughlin Boiler Tube distributor. You will get tubes that are installed at a lower cost . . . which last longer . . . and you will get them just as quickly as you need them.

JONES & LAUGHLIN STEEL CORPORATION

AMERICAN IRON AND STEEL WORKS
PITTSBURGH, PENNSYLVANIA

MAKERS OF HIGH QUALITY IRON AND STEEL PRODUCTS SINCE 1850

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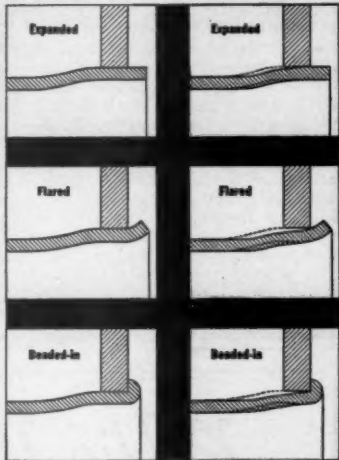
Why High Ductility is Vitaly Important

(a) Jones & Laughlin Seamless Tubes with their high ductility form a smooth, tight joint and "stay put" permanently . . . when they are expanded, flared and beaded in. See diagrams below.

(b) Tubes not sufficiently ductile resist forming and tend to pull away from the boiler plate. Such tubes require longer time for working and leave imperfect joints. See diagrams below.

RIGHT

WRONG



J & L manufactures a complete line of seamless and welded steel tubular products. This includes seamless pressure tubes, condenser and heat exchanger tubes.

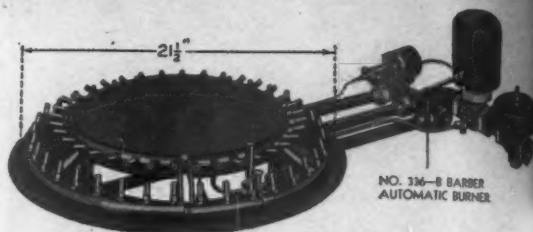
Flange steel plates and firebox steel.



**J & L—ALWAYS MAKING FINER CARBON STEEL
PRODUCTS FOR NEW AND BETTER USES**

BARBER CONVERSION BURNERS Have a Record Which Merits Your Approval

IN demonstrating a gas conversion burner, you may not get very technical. If you do, it's easy to show BARBER engineering superiority, from supply line to thermostat. What the customer usually wants to know is the performance record of the burner—and there again BARBER stands alone. For economy and trouble free service, BARBER'S 20-year record is unparalleled. BARBER is the emblem of a responsible manufacturer, with installations running high into the thousands. BARBER is recommended by leading Gas Companies. Remember that when you take on the responsibility of selling any conversion burner to the public.



The "B" Model shown comes in 8 sizes for round grates 12 to 24" in diameter. Also a wide range of sizes for oblong grates. Patented BARBER jets insure complete combustion with a "scrubbing" flame action on walls of firebox. No firebrick or refractory elements needed. Baltimore Safety Pilot Listed in A. G. A. Directory of Approved Appliances.

Ask for Catalog and Price List on Conversion Burners for Furnaces and Boilers, Burner Units for Gas Appliances, and Gas Pressure Regulators. We supply sales folders, at your request, for mailing to your customers.

THE BARBER GAS BURNER COMPANY
3704 SUPERIOR AVENUE, CLEVELAND, OHIO

BARBER Automatic JET GAS BURNERS

For Warm Air Furnaces, Steam and Hot Water Boilers and Other Appliances

Public Utilities Fortnightly

THE review magazine of current opinion and news relating to public utilities. Conducted as an open forum for the frank discussion of both sides of controversial questions—economic, legal and financial; also gives trends in the present-day control of these companies—governmental competition—state and Federal regulation.

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A magazine of unusual value and current stimulation to all persons holding positions with, or having a financial interest in, public utilities.

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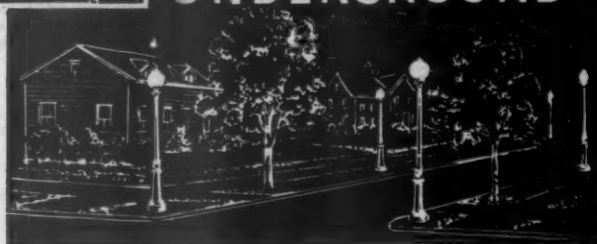
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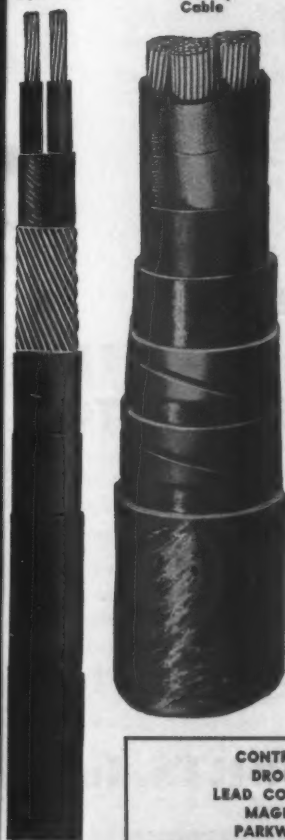
OVERHEAD OR

UNDERGROUND



Service
Entrance
Cable
Type SE
Style UBN

Non-
Metallic
Parkway
Cable



WITH CRESCENT INSULATED WIRE AND CABLE

For replacement or reinforcement of existing lines to take care of increasing loads, Crescent offers a complete line of Wires and Cables that anticipate every requirement. And a nation-wide engineering-sales organization is on call to assist you in planning further development of power transmission and distribution.

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All types of Building Wire and all kinds of Special Cables to meet A.S.T.M., A.R.A., I.P.C.E.A., N.E.M.A., and all Railroad, Government and Utility Companies' Specifications.

WHO'S WHO

IN THE

U. S. GOVERNMENT UTILITY PROGRAM

A directory, with biographical data, of Federal officials and employees whose duties embrace utility regulation and other utility problems, including construction and operation of Federal properties.

Compiled by **GEORGE E. DOYING, Editor**
P.U.R. Executive Information Service

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MORE THAN 300 NAMES LISTED
30 DEPARTMENTS, COMMISSIONS, ETC.

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PUBLIC UTILITIES REPORTS, Inc.

**MUNSEY BUILDING
WASHINGTON, D. C.**

SERVICE Behind the TRUCK



The Seaboard Air Line Railway uses this International 1 1/2-ton Model D-30 Truck in Tampa, Fla. Other sizes in the International line range from the Half-Ton unit to powerful Six-Wheelers.

Capitalize on INTERNATIONAL'S After-Sale Service

Long before the automotive era, service to the customer was the keynote that guided the men who founded International Harvester. Their policy has been faithfully adhered to through the years.

Today International Harvester has 237 Company-owned branches located at strategic points in the United States and Canada, fully equipped to give International Truck owners the kind of service they have a right to expect. Factory-trained service men, working to precision standards and using genuine International quality parts, turn out the work in the shortest possible time.

Whether International Trucks roll up mileage on the nation's highways or confine their work to city streets, they are *always close to International factory-standard service. Truck dollars go farther with International*—the investment is protected throughout the life of the truck by this matchless after-sale service. Visit our nearby branch and see International service "working." Talk to International owners and you will know its value.

INTERNATIONAL HARVESTER COMPANY

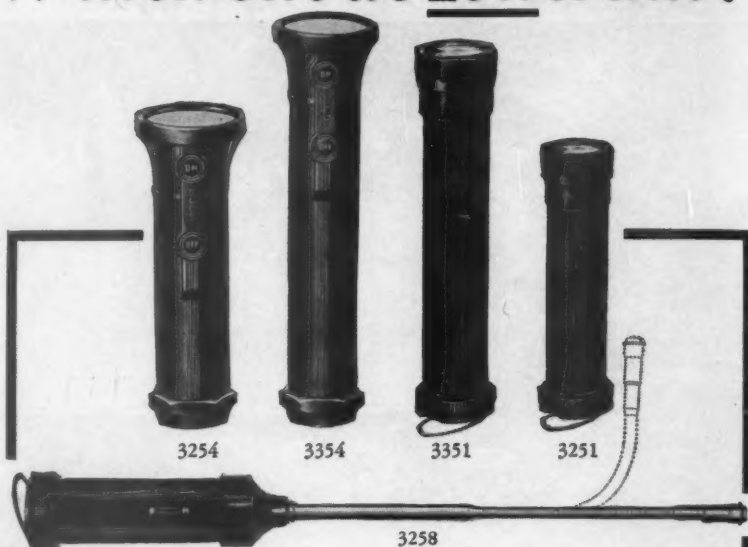
(Incorporated)

180 North Michigan Avenue, Chicago, Illinois

INTERNATIONAL TRUCKS

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Which one do You want?



LOOK OVER THIS GROUP of fine new "Eveready" on-the-job flashlights, specially designed to meet the special needs of oil men and electricians.

The new **WATERPROOF** Flashlights, 3354 and 3254, are *completely covered*, switch-and-all, with a soft rubber sleeve. Unbreakable lenses, chrome plated reflectors. Proof against hot wires, acids, gasoline, oil, alcohol, greases and dirt.

The two and three cell general purpose Industrial Flashlights, 3251 and 3351, have unbreakable lenses, hand-replaceable switches are cased in semi-hard rubber. Safe with "hot stuff." Unaffected by water, oil, gasoline, alcohol, acids or dropping impact. No. 3258, the new Flexible Extension Flashlight, answers the demand for a safe light for inspecting moving machinery, railway journal boxes, drums, barrels, sounding pipes.

NATIONAL CARBON COMPANY, INC.

General Offices: New York, N. Y.; Branches: Chicago, San Francisco

Unit of Union Carbide **UCC** and Carbon Corporation

The word "Eveready" is the trade-mark of National Carbon Co., Inc.

MOUNTING!

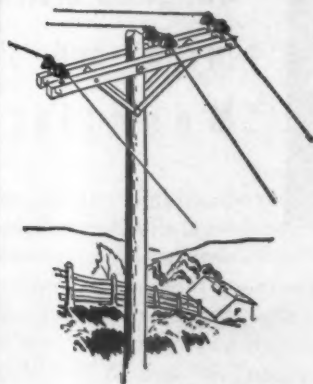
Sales of Amco "All Weather" Manila Rope to important public utilities indicate a strong preference for this famous rot-proofed, water-proofed rope. Next time you order, specify

AMCO

"ALL WEATHER" MANILA ROPE



See American First



*Better Lines
are built with
Porcelain Products Insulators*



PORCELAIN PRODUCTS, INC.
PARKERSBURG, W. VA., U. S. A.

HI-VOLTAGE INSULATORS

—SINCE 1894

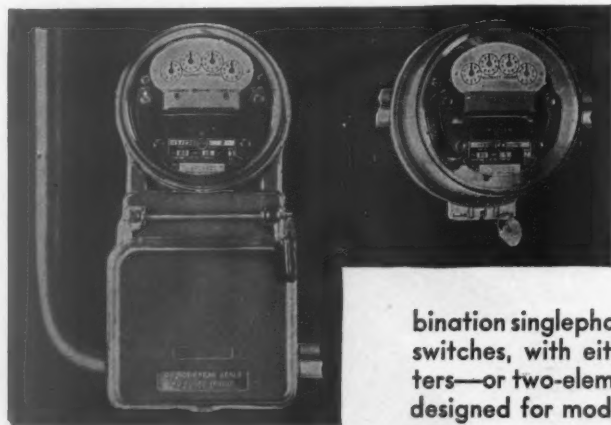
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HYDRAULIC TURBINES

FRANCIS AND HIGH SPEED RUNNERS

- ★ Penstocks
- ★ Butterfly Valves
- ★ Power Operated Rack Rakes
- ★ Gates and Gate Hoists
- ★ Electrically Welded Racks

NEWPORT NEWS SHIPBUILDING AND DRY DOCK COMPANY
Hydraulic Turbine Division
NEWPORT NEWS, VA.



Sangamo Meters in "A" and "S" Mountings

Sangamo modern meters, whether singlephase watt-hour meters—com-

bination singlephase watt-hour meters and time switches, with either single or two-rate registers—or two-element watt-hour meters—all are designed for modern "A" and "S" mountings.

Modern Meters for Modern Loads!

SANGAMO ELECTRIC COMPANY
 SPRINGFIELD, ILLINOIS

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A New Low-Cost Foam Tool!

Combines Water, Solution and Air To Form Fire-Smothering Foam

Public utilities are welcoming this revolutionary larger-capacity foam equipment for flammable liquid fires.

The specially designed PHOMAIRE Play Pipe connects to your hose line ($\frac{3}{4}$ " to $2\frac{1}{2}$ ""). When the water is turned on, PHOMAIDE, a new foam-making solution carried in a Hip Pack, and air are automatically drawn into the water stream in the proper proportions to form foam.

There are no complicated preliminaries, no confusing adjustments, no moving parts. And only one man is required at the Play Pipe.

Less than 20 gallons of water at a pressure of 75 pounds or more are required per minute. This is the only efficient foam unit available for small lines. One gallon of Phomaide Solution makes 350 gallons of foam. 300 to 400 gallons per minute may be continuously produced by merely pouring additional solution into the Hip Pack.

This is NEWS. Without obligation, ask for descriptive literature, prices and a demonstration of the Phomaire Unit illustrated at the left. Don't wait! Mail your request now.

Get the Latest Foam Equipment

Phomaire and **Phomaide**
PLAY PIPE SOLUTION

developed, made and sold by

Pyrene Manufacturing Company
NEWARK NEW JERSEY
ATLANTA KANSAS CITY CHICAGO SAN FRANCISCO





IRON SPONGE

IRON SPONGE *stands up*—that's why it lasts longer and maintains the porosity of the bed, prevents excessive back pressures and absorbs greater capacity of sulphur. It gives you real economy in your gas purification by reducing the frequency of box renewals. Get set for the coming season by ordering your supply of Iron Sponge now—immediately available by rail, boat or truck.

Write for Bulletin No. 101-B-1

THE DIFFERENCE is in Your Favor

Compare the compressibility of ordinary wood shavings (shown at left) with the firmness of Connelly patented chip filler (shown at right), as used in Connelly IRON SPONGE. This resistance to "packing down" is all to your advantage when you use this ideal purification material.



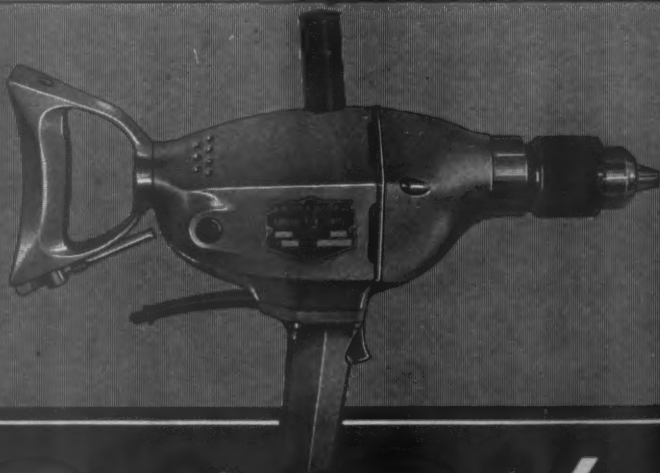
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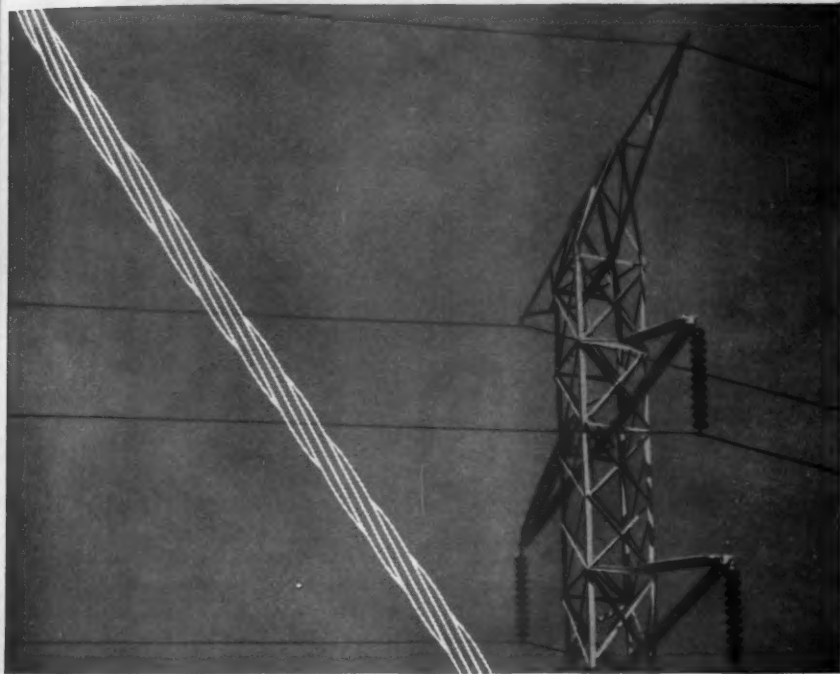
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Whether it's ground wire, messenger strand, or Form-set (preformed) guy wire; whether it's galvanized or bethanized (electrically coated), you'll find this "know how" invariably present in Bethlehem Strand.

BETHLEHEM STEEL COMPANY



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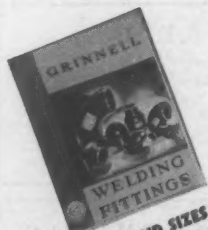
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